DSC-HX20/HX20V/HX30/HX30V

SERVICE MANUAL

LEVEL 2

Ver. 1.2 2012.06

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model
Hong Kong Model
Chinese Model
Korea Model
Japanese Model

Internal memory ON BOARD

Revised-2

Replace the previously issued SERVICE MANUAL 9-834-659-32 with this Manual.

Photo: DSC-HX30V/BLACK

SERVICE NOTE (Check the following note before the service.)

– ENGLISH –

1-1. PRECAUTION ON REPLACING THE SY-325 BOARD
1-2. ADDITION OF DESTINATION DATA FILE
1-3. METHOD FOR COPYING OR ERASING THE DATA IN INTERNAL MEMORY
1-4. HOW TO WRITE DATA TO INTERNAL MEMORY
1-5. SELF-DIAGNOSIS FUNCTION
1-6. PROCESS AFTER FIXING FLASH ERROR
1-7. PRECAUTION ON REPLACING THE CABINET (BOTTOM)
1-8. CHECKING THE Wi-Fi FUNCTION
1-9. ORNAMENTAL RING A OR BARRIER ASSY REPLACING METHOD
1-10. ZOOM MOTOR GEAR BLOCK REPLACING METHOD
1-11. CAM TUBE (B) ASSY REPLACING METHOD
1-12. FINAL INSPECTION

– JAPANESE –

1-1. SY-325基板交換時の注意
1-2. Destination Data ファイルの追加について
1-3. 内蔵メモリーのデータコピーおよび消去方法
1-4. 内蔵メモリーへデータを書き戻す方法
1-5. 自己診断機能
1-6. フラッシュエラー発生時の対処法
1-7. キャビネット(底)交換時の注意
1-8. Wi-Fi機能の確認

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

DIGITAL STILL CAMERA

SONY®

DSC-HX20/HX20V/HX30/HX30V_L2
9-834-659-33

Sony Corporation

2012F08-1
© 2012.06
Published by Sony Techno Create Corporation

Revision History

Ver.	Date	History	Contents	S.M. Rev. issued
1.0	2012.03	Official Release	—	—
1.1	2012.05	Revised-1 (A1 12-008)	• Addition of SERVICE NOTE. Page 1-6, 1-11, 1-12, 1-13, 1-19 • Revision of EXPLODED VIEWS. Page 2-3, 2-4, 2-5, 2-6, 2-7 • Correction of ACCESSORIES. Page 2-8 • Addition of Flyer	Yes
1.2	2012.06	Revised-2 (A2 12-082)	• Addition of DSC-HX20. Page 2, 1-5, 1-11, 2-3, 2-6	Yes

Ver. 1.2 2012.06
The changed portions from
Ver. 1.1 are shown in blue.

– ENGLISH –

Self Diagnosis Supported model Cyber-shot MEMORY STICK InfoLITHIUM G TYPE SDXC CLASS 4 HDMI AVCHD Progressive

SPECIFICATIONS

Camera

[System]

Image device: 7.76 mm (1/2.3 type)
Exmor R CMOS sensor
Total pixel number of camera:
Approx. 18.9 Megapixels
Effective pixel number of camera:
Approx. 18.2 Megapixels
Lens: Sony G 20× zoom lens
f = 4.45 mm – 89 mm (25 mm – 500 mm (35 mm film equivalent))
F3.2 (W) – F5.8 (T)
While shooting movies (16:9):
27.5 mm – 550 mm*
While shooting movies (4:3):
34 mm – 680 mm*
* When [Movie SteadyShot] is set to [Standard]
SteadyShot: Optical
Exposure control: Automatic exposure, Manual exposure, Scene Selection (15 modes)
White balance: Automatic, Daylight, Cloudy, Fluorescent 1/2/3, Incandescent, Flash, One Push, White Balance Shift
Signal format:
For 1080 50i:
PAL color, CCIR standards HDTV 1080/50i, 1080/50p specification
For 1080 60i:
NTSC color, EIA standards HDTV 1080/60i, 1080/60p specification
File format:
Still images: JPEG (DCF, Exif, MPF Baseline) compliant, DPOF compatible
3D still images: MPO (MPF Extended (Disparity Image)) compliant
Movies (AVCHD format):
AVCHD format Ver. 2.0 compatible
Video: MPEG-4 AVC/H.264
Audio: Dolby Digital 2ch, equipped with Dolby Digital Stereo Creator
• Manufactured under license from Dolby Laboratories.
Movies (MP4 format):
Video: MPEG-4 AVC/H.264
Audio: MPEG-4 AAC-LC 2ch
Recording media: Internal Memory (Approx. 105 MB), “Memory Stick Duo” media, SD cards, “Memory Stick Micro” media, microSD memory cards
Flash: Flash range (ISO sensitivity (Recommended Exposure Index) set to Auto):
Approx. 0.4 m to 7.1 m
(1 ft 3 3/4 inches to 23 ft 3 5/8 inches) (W)
Approx. 1.5 m to 3.9 m
(4 ft 11 1/8 inches to 12 ft 9 5/8 inches) (T)

[Input and Output connectors]

HDMI connector: HDMI mini jack
Micro USB connector:
USB communication
USB communication: Hi-Speed USB (USB 2.0)

[Screen]

LCD screen:
7.5 cm (3.0 type) TFT drive
Total number of dots:
921 600 dots

[Power, general]

Power: Rechargeable battery pack
NP-BG1, 3.6 V
NP-FG1 (sold separately), 3.6 V
AC Adaptor AC-UB10/UB10B, 5 V
Power consumption (during shooting):
1.1 W
Operating temperature: 0 °C to 40 °C (32 °F to 104 °F)
Storage temperature: –20 °C to +60 °C (–4 °F to +140 °F)
Dimensions (CIPA compliant):
106.6 mm × 61.9 mm × 34.6 mm (4 1/4 inches × 2 1/2 inches × 1 3/8 inches) (W/H/D)
Mass (CIPA compliant) (including NP-BG1 battery pack, “Memory Stick Duo” media):
Approx. 254 g (9.0 oz)
Microphone: Stereo
Speaker: Monaural
Exif Print: Compatible
PRINT Image Matching III:
Compatible

[Wireless LAN] (DSC-HX30/HX30V only)

Supported format: IEEE 802.11 b/g/n

AC Adaptor AC-UB10/UB10B

Power requirements: AC 100 V to 240 V, 50 Hz/60 Hz, 70 mA
Output voltage: DC 5 V, 0.5 A
Operating temperature: 0 °C to 40 °C (32 °F to 104 °F)
Storage temperature: –20 °C to +60 °C (–4 °F to +140 °F)
Dimensions:
Approx. 50 mm × 22 mm × 54 mm (2 inches × 7/8 inches × 2 1/4 inches) (W/H/D)
Mass:
For the USA and Canada: Approx. 48 g (1.7 oz)
For countries or regions other than the USA and Canada: Approx. 43 g (1.5 oz)

Rechargeable battery pack NP-BG1

Used battery: Lithium-ion battery
Maximum voltage: DC 4.2 V
Nominal voltage: DC 3.6 V
Maximum charge voltage: DC 4.2 V
Maximum charge current: 1.44 A
Capacity:
typical: 3.4 Wh (960 mAh)
minimum: 3.3 Wh (910 mAh)

Design and specifications are subject to change without notice.

Model information table

Model	DSC-HX20	DSC-HX20V				DSC-HX30	DSC-HX30V		
Destination	AEP	US	E	AEP, E, AUS	UK	CH	US, J	CND, E, KR	HK
Color system	PAL	NTSC	NTSC	PAL	PAL	PAL	NTSC	NTSC	PAL
GPS	×	○	○	○	○	×	○	○	○
TransferJet	×	○	×	×	○	○	○	×	×

• Abbreviation
AUS : Australian model
CH : Chinese model
CND : Canadian model
HK : Hong Kong model
J : Japanese model
KR : Korea model

– JAPANESE –

自己診断搭載機種 Cyber-shot MEMORY STICK InfoLITHIUM G TYPE SDXC CLASS 4 HDMI AVCHD Progressive

概略仕様

本体

[システム]

撮像素子：7.76 mm（1/2.3型）
Exmor R CMOSセンサー
総画素数：約1890万画素
カメラ有効画素数：約1820万画素
レンズ：Sony G 20倍ズームレンズ
f=4.45 mm ～ 89 mm
（25 mm ～ 500 mm（35 mmフィルム換算値））、F3.2（W）～F5.8（T）
動画撮影時（16：9）：27.5 mm ～ 550 mm*
動画撮影時（4：3）：34 mm ～ 680 mm*
*［動画手ブレ補正］が［スタンダード］のとき
手ブレ補正：光学式
露出制御：自動、マニュアル露出、シーンセレクション（15モード）
ホワイトバランス：オート、太陽光、曇天、蛍光灯1、2、3、電球、フラッシュ、ワンプッシュ、ホワイトバランスシフト
信号方式：NTSCカラー、EIA標準方式
記録方式：
静止画記録方式：
JPEG（DCF、Exif、MPF Baseline）準拠、DPOF対応
3D静止画記録方式：MPO（MPF Extended（立体視））準拠
動画記録方式（AVCHD方式）：
AVCHD規格 Ver.2.0準拠
映像：MPEG-4 AVC/H.264
音声：Dolby Digital 2ch
ドルビーデジタルステレオクリエーター搭載
・ドルビーラボラトリーズからの実施権に基づき製造されています。
動画記録方式（MP4方式）：
映像：MPEG-4 AVC/H.264
音声：MPEG-4 AAC-LC 2ch
記録メディア：内蔵メモリー 約105 MB、“メモリースティック デュオ”、SDカード、“メモリースティック マイクロ”、microSD メモリーカード
フラッシュ：撮影範囲（ISO感度（推奨露光指数）がオートのとき）
約0.4 m～ 7.1 m（W）/約1.5 m～ 3.9 m（T）

[入出力端子]

HDMI端子：HDMIミニ端子
マイクロUSB端子：USB通信
USB通信：Hi-Speed USB（USB 2.0）

[モニター]

液晶モニター：
7.5 cm（3.0型）、TFT駆動
総ドット数：921 600ドット

[電源・その他]

電源：リチャージャブルバッテリーパックNP-BG1、3.6 V
NP-FG1（別売）、3.6 V
ACアダプター AC-UB10/UB10B、5 V
消費電力（撮影時）：
約1.1 W
動作温度：0 ℃～ 40 ℃
保存温度：－20 ℃～ +60 ℃
外形寸法（CIPA準拠）：
106.6 mm×61.9 mm×34.6 mm（幅×高さ×奥行き）
本体質量（CIPA準拠）
（バッテリー NP-BG1、“メモリースティック デュオ”を含む）：
約254 g
マイクロホン：ステレオ
スピーカー：モノラル
Exif Print：対応
PRINT Image Matching III：対応

[ワイヤレスLAN]

対応規格：IEEE 802.11b/g/n

ACアダプター AC-UB10/UB10B

定格入力：AC 100 V ～ 240 V、50 Hz/60 Hz、70 mA
定格出力：DC 5 V、0.5 A
動作温度：0 ℃～ 40 ℃
保存温度：－20 ℃～ +60 ℃
外形寸法：約50 mm×22 mm×54 mm（幅×高さ×奥行き）
本体質量：約48 g

リチャージャブルバッテリーパックNP-BG1

使用電池：リチウムイオン蓄電池
最大電圧：DC 4.2 V
公称電圧：DC 3.6 V
容量：3.4 Wh（960 mAh）

本機や付属品の仕様および外観は、改良のため予告なく変更することがありますが、ご了承ください。

Caution
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.
Dispose of used batteries according to the instructions.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer.

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are “pinched” or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, through functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the B+ voltage to see it is at the values specified.
6. Flexible Circuit Board Repairing
   - Set the soldering iron tip temperature to 350 °C approximately.
   - Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
   - Be careful not to apply force on the conductor when soldering or unsoldering.

UNLEADED SOLDER

This unit uses unleaded solder.
Boards requiring use of unleaded solder are printed with the lead free mark (LF) indicating the solder contains no lead.
(**Caution:** Some printed circuit boards may not come printed with the lead free mark due to their particular size.)

: LEAD FREE MARK

Be careful to the following points to solder or unsolder.

- Set the soldering iron tip temperature to 350 °C approximately.
  If cannot control temperature, solder/unsolder at high temperature for a short time.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Be sure to control soldering iron tips used for unleaded solder and those for leaded solder so they are managed separately. Mixing unleaded solder and leaded solder will cause detachment phenomenon.

注意
電池の交換は，正しく行わないと破裂する恐れがあります。
電池を交換する場合には必ず同じ型名の電池又は同等品と交換してください。
使用済み電池は，取扱指示に従って処分してください。

サービス，点検時には次のことにご注意ください。

1. 注意事項をお守りください。
   サービスのとき特に注意を要する個所については，キャビネット，シャーシ，部品などにラベルや捺印で注意事項を表示しています。これらの注意書き及び取扱説明書等の注意事項を必ずお守り下さい。
2. 指定部品のご使用を
   セットの部品は難燃性や耐電圧など安全上の特性を持ったものとなっています。従って交換部品は，使用されていたものと同じ特性の部品を使用して下さい。特に回路図，部品表に⚠印で指定されている安全上重要な部品は必ず指定のものをご使用下さい。
3. 部品の取付けや配線の引きまわしはもとどおりに
   安全上，チューブやテープなどの絶縁材料を使用したり，プリント基板から浮かして取付けた部品があります。また内部配線は引きまわしやクランパによって発熱部品や高圧部品に接近しないよう配慮されていますので，これらは必ずもとどおりにして下さい。
4. サービス後は安全点検を
   サービスのために取外したネジ，部品，配線がもとどおりになっているか，またサービスした個所の周辺を劣化させてしまったところがないかなどを点検し，安全性が確保されていることを確認して下さい。
5. チップ部品交換時の注意
   - 取外した部品は再使用しないで下さい。
   - タンタルコンデンサのマイナス側は熱に弱いため交換時は注意して下さい。
6. フレキシブルプリント基板の取扱いについて
   - 半田こてのこて先温度は約350℃に設定してください。
   - 同一パターンに何度もコテ先を当てないで下さい。（3回以内）
   - パターンに力が加わらないよう注意して下さい。

無鉛半田について
本機には無鉛半田が使用されています。
無鉛半田を使用している基板には，無鉛(Lead Free)を意味するレッドフリーマークがプリントされています。
（注意：基板サイズによっては，無鉛半田を使用していてもレッドフリーマークがプリントされていないものがあります）

：レッドフリーマーク
無鉛半田は，下記の点に注意して使用してください。

- 半田こてのこて先温度は約350℃に設定してください。
  温度調節が無理な場合は，高温短時間で作業を行ってください。
  注意： 半田こてを長く当てすぎると，基板のパターン(銅箔)がはがれてしまうことがありますので，注意してください。また，従来の半田よりも粘性が強いため，IC端子などが半田ブリッジしないように注意してください。
- 半田こてのこて先は，必ず無鉛半田用と有鉛半田用に分けて管理してください。
  無鉛半田と有鉛半田が混在すると剥離現象が発生してしまいます。

1. SERVICE NOTE

1-1. PRECAUTION ON REPLACING THE SY-325 BOARD

DESTINATION DATA

When you replace to the repairing board, the written destination data of repairing board also might be changed to original setting.
Start the Adjust Manual in the Adjust Station and execute the “DESTINATION DATA WRITE”.

RESTORE DATA

When you replace to the repairing board, get the data from the former one.
Start the Adjust Manual in the Adjust Station and perform “RESTORE DATA” to get the data.
The data getting for this model is as follows.

- USB SERIAL No.
- Wide Limit Data
- Angular Velocity Sensor Sensitivity adjustment
- AWB standard data input & check, Color reproduction check
- Strobe adjustment

Regarding the PlayMemories Home

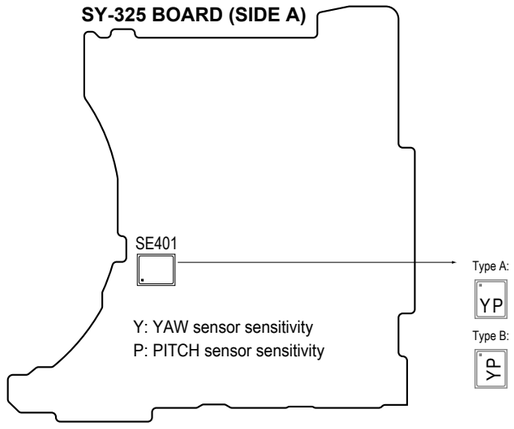
PlayMemories Home has been written in internal memory.
SY-325 board for service is supplied with written the PlayMemories Home.

USB SERIAL No.

The set is shipped with a unique ID (USB Serial No.) written in it.
This ID has not been written in a new board for service, and therefore it must be entered after the board replacement.
Start the Adjust Manual in the Adjust Station and execute the “USB SERIAL No. INPUT”.

Angular Velocity Sensor

When you replace to the repairing board, write down the sensitivity displayed on the angular velocity sensor (SE401).
Start the Adjust Manual in the Adjust Station and execute the “Angular velocity sensor sensitivity adj”.



Note: The sensor sensitivity of SE401 of SY-325 board is written only repair parts.

– ENGLISH –

1-2. ADDITION OF DESTINATION DATA FILE

If the Destination Data file included in the Adjust manual is old, “DESTINATION DATA WRITE” cannot be executed in some cases.
In that case, download a new Destination Data file from the TISS homepage according to the following procedure.

Note 1: To perform Destination Data Write for this model, the Adjust manual of the DSC-WX50 series must have been installed.
Install the Adjust manual of the DSC-WX50 series in advance.
Note 2: The actual image may differ from the image shown above.

1) If the Destination Data file in the Adjust manual in use is old, the window shown in Fig. 1 is displayed.
Click the [OK] button.

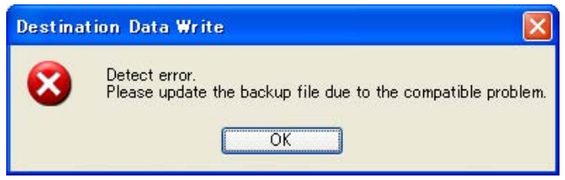
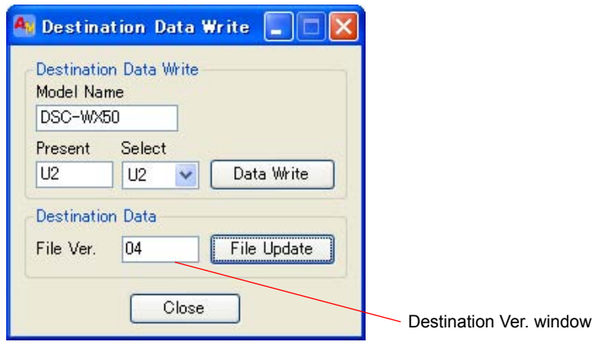


Fig. 1

2) The Destination Data Write window opens.
Check the version of the Destination Data file retained in the Adjust manual.

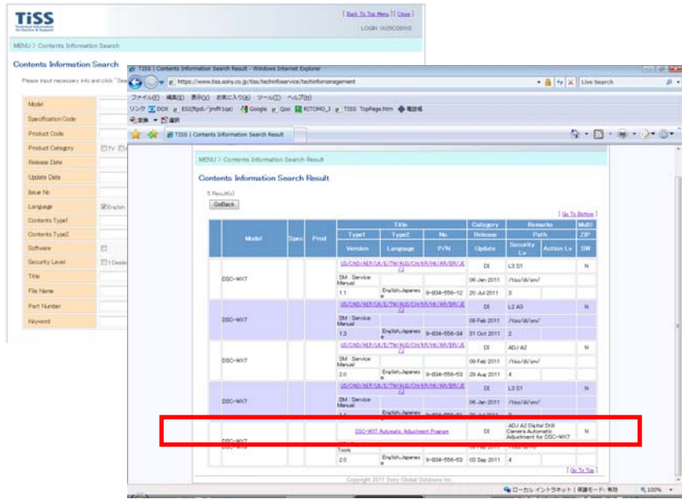


3) Search the model whose new Destination Data file you want to get on the TISS homepage.
When the Destination Data file has been updated, a file with a name “Destination File For ‘model name’.zip” is registered.

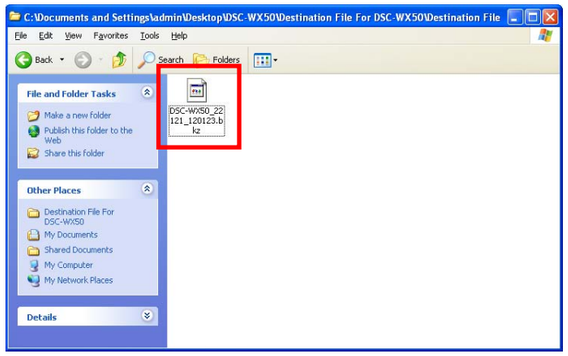
(Example) Destination File For DSC-WX50.zip

Furthermore, the version supported by the Destination Data file is shown in the Remarks column.

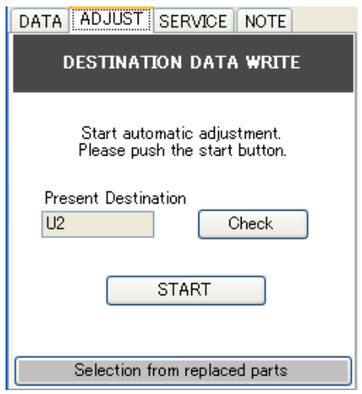
Note : If the Destination Data file has not been updated, contact the Service Headquarters.



4) Download the Destination Data file of the relevant model and unzip the file.

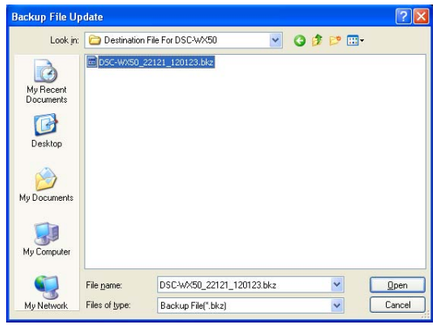


5) Execute “DESTINATION DATA WRITE” in the Adjust tab of the Adjust manual.
Click the [START] button.



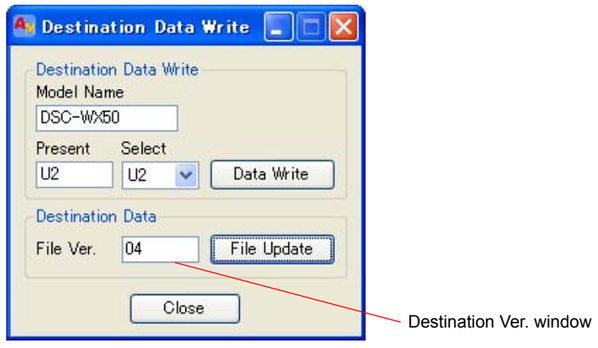
6) Click the [File Update] button in the window.

7) A file selection screen opens. Select the Destination Data file to be added and click the [Open] button.



8) When the file has been successfully added, the following window opens.

9) Check the Destination Ver. window and confirm that the version has been updated.



1-3. METHOD FOR COPYING OR ERASING THE DATA IN INTERNAL MEMORY

The data can be copied/erased by the operations on the HOME screen. (When erasing the data, execute formatting the internal memory.)

Note 1: When replacing the SY-325 board, erase the data in internal memory of the board before replacement.
Note 2: When replacing the SY-325 board, execute formatting and initialize the internal memory after replacement.

Method for Copying the Data in Internal Memory

Copy

Copies all images in the internal memory to a memory card.

1. Insert a memory card with sufficient free capacity into the camera.
2. MENU → (Settings) → (Memory Card Tool) → [Copy] → [OK] → ●

Notes
- Use a fully charged battery pack. If you attempt to copy image files using a battery pack with little remaining charge, the battery pack may run out, causing copying to fail or possibly corrupting the data.
- Images cannot be copied individually.
- The original images in the internal memory are retained even after copying. To delete the contents of the internal memory, remove the memory card after copying, then format the internal memory ([Format] in [Internal Memory Tool]).
- The data will be copied to the recording folder that is currently being used, with a number one higher than the largest data number in that folder.

Method for Formatting the Internal Memory or “Memory Stick Duo” media

Format

Formats the memory card or the internal memory.
When you use a memory card with this camera for the first time, it is recommended to format the card using the camera for stable performance of the memory card before shooting. Note that formatting permanently erases all data on the memory card, and is unrecoverable. Save precious data on a computer, etc.

1. MENU → (Settings) → (Memory Card Tool) or (Internal Memory Tool) → [Format] → [OK] → ●

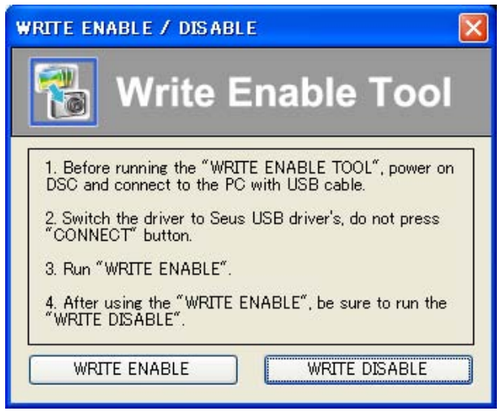
Note
- Note that formatting permanently erases all data including even protected images.

1-4. HOW TO WRITE DATA TO INTERNAL MEMORY

Usually, the camera has been set so as to disable the data writing from the PC to the internal memory of the camera.
This setting must be changed temporarily when the data is to be written to the internal memory such as a case after the board replacement.
To change settings is enabled with using the writing enabler tool (Write Enable Tool) on the Adjust Manual is activating from the Adjust Station.

Data writing method

1) Start the Adjust Manual from the Adjust Station.
2) Click (Write Enable Tool) button.
3) Click “Activate Write Enable Mode” button.


WRITE ENABLE / DISABLE
Write Enable Tool
1. Before running the "WRITE ENABLE TOOL", power on DSC and connect to the PC with USB cable.
2. Switch the driver to Seus USB driver's, do not press "CONNECT" button.
3. Run "WRITE ENABLE".
4. After using the "WRITE ENABLE", be sure to run the "WRITE DISABLE".
WRITE ENABLE
WRITE DISABLE

4) Upon completion of the setting change, the following message will be displayed.

5) Return the driver to the original one, and connect the PC to the camera (USB mode: Mass Storage).
6) Write the data read out into the PC to the internal memory of the camera.
7) Disconnect the PC from the camera, and turn off the camera.

Note: By turning off the camera, the write enable setting is reset.

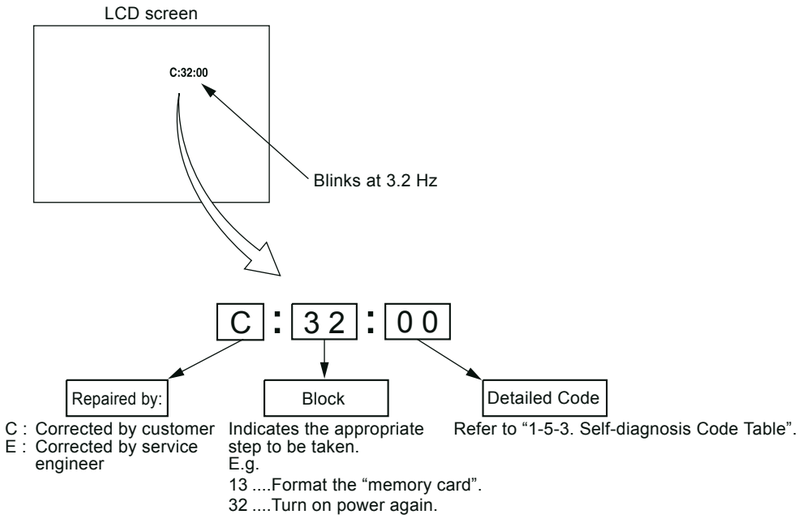
1-5. SELF-DIAGNOSIS FUNCTION

1-5-1. Self-diagnosis Function

When problems occur while the unit is operating, the self-diagnosis function starts working, and displays on the LCD screen what to do.
Details of the self-diagnosis functions are provided in the Instruction manual.

1-5-2. Self-diagnosis Display

When problems occur while the unit is operating, the LCD screen shows a 4-digit display consisting of an alphabet and numbers, which blinks at 3.2 Hz. This 5-character display indicates the “repaired by:”, “block” in which the problem occurred, and “detailed code” of the problem.



1-5-3. Self-diagnosis Code Table

Self-diagnosis Code					Symptom/State	Correction
Repaired by:	Block Function		Detailed Code			
C	1	3	0	1	The internal memory has experienced a media error.	Turn the power off and on again.
					The internal memory has experienced a format error.	Format the internal memory.
					Memory card is unformatted.	Format the memory card.
					Memory card is broken.	Insert a new memory card.
					Memory card type error.	Insert a supported memory card.
					The camera cannot read or write data on the memory card.	Turn the power off and on again, or taking out and inserting the memory card several times.
C	3	2	0	1	Trouble with hardware.	Turn the power off and on again.
E	4	1	0	0*	Abnormality of network control.	Turn power off and turn power on again.
E	4	1	0	1*	Abnormality of network control device.	Turn power off and turn power on again.
E	6	1	0	0	Difficult to adjust focus. (Cannot initialize focus)	Retry turn the power on by the power switch. If it does not recover, check the focus reset sensor of lens block (pin ㊲, ㊴ of CN405 on the SY-325 board). If it is OK, check the focus motor drive IC (IC401 on the SY-325 board).
E	6	1	1	0	Zoom operations fault. (Cannot initialize zoom lens.)	Retry turn the power on by the power switch. Check the zoom reset sensor of lens block (pin ㉑ of CN405 on the SY-325 board) when zooming is performed when the zoom button is operated. If it is OK, check the zoom motor drive IC (IC401 on the SY-325 board).
E	6	1	3	0	Reset position detection error on the stepper iris initializing.	Turn power off and turn power on again.
E	6	2	0	2	Abnormality of IC for steadyshot.	Check or replacement of the IC for steadyshot (IC401 on the SY-325 board).
E	6	2	1	0	Lens initializing failure.	Check or replacement of the IC for steadyshot (IC401 on the SY-325 board).
E	6	2	1	1	Lens overheating (PITCH).	Check the HALL element (PITCH) of optical image stabilizer (pin ⑨, ⑪ of CN405 on the SY-325 board). If it is OK, check PITCH angular velocity sensor (SE401 on the SY-325 board) peripheral circuits.
E	6	2	1	2	Lens overheating (YAW).	Check the HALL element (YAW) of optical image stabilizer (pin ⑱, ⑳ of CN405 on the SY-325 board). If it is OK, check YAW angular velocity sensor (SE401 on the SY-325 board) peripheral circuits.
E	6	2	2	0	Abnormality of thermistor.	Check the OIS temp sensor of optical image stabilizer (pin ⑧ of CN405 on the SY-325 board).
E	9	1	0	1	Abnormality when flash is being charged.	Checking of flash unit or replacement of flash unit. (Note 1)
E	9	4	0	0	Internal memory fault.	Inspect the internal memory (IC211 on the SY-325 board).
E	9	5	0	0	GPS hardware error.	Check whether the RL-130 flexible board of connected between SY-325 board and RL-129 board is broken, and check whether it is inserted imperfectly. If there is no problem the coaxial cable or flexible board, inspect or replacement of the SY-325 or RL-129 board.
E	9	5	0	1	Acceleration sensor hardware error. (GPS hardware error)	Check whether the RL-130 flexible board of connected between SY-325 board and RL-129 board is broken, and check whether it is inserted imperfectly. If there is no problem the coaxial cable or flexible board, inspect or replacement of the SY-325 or RL-129 board.
E	9	5	0	2	Electronic compass hardware error. (GPS hardware error)	Check whether the RL-130 flexible board of connected between SY-325 board and RL-129 board is broken, and check whether it is inserted imperfectly. If there is no problem the coaxial cable or flexible board, inspect or replacement of the SY-325 or RL-129 board.

Note 1: After repair, be sure to perform “1-6. PROCESS AFTER FIXING FLASH ERROR”.
Note 2: Functions of codes with * mark are not provided in this unit.

Ver. 1.2 2012.06
The changed portions from
Ver. 1.1 are shown in blue.

1-6. PROCESS AFTER FIXING FLASH ERROR

When “FLASH error” (Self-diagnosis Code E : 91 : 01) occurs, to prevent any abnormal situation caused by high voltage, setting of the flash is changed automatically to disabling charge and flash setting.
After fixing, this setting needs to be deactivated. Flash error code can be on the HOME screen.

Method for Initializing the Flash Error Code

Reset Flash Error using the Flash Error Repair Tool Ver_[].[].exe.

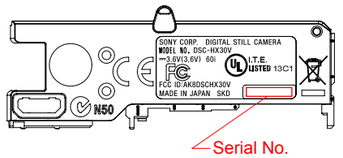
1-7. PRECAUTION ON REPLACING THE CABINET (BOTTOM)

1-7-1. Precaution on ordering the CABINET (BOTTOM)

The model display adopts the laser printing method.
Therefore, the Cabinet (Bottom) for replacement differs depending on the destination.
As similar displays are provided, choose the suitable one for order.

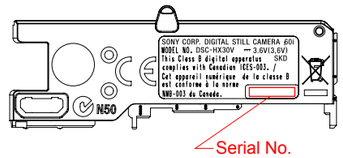
Note: After replacing the Cabinet (Bottom) , the serial number for it will be changed to the one exclusive for service use.
Inform a customer of the serial number change and change the serial number in the repair data.

DSC-HX30V (US Model)



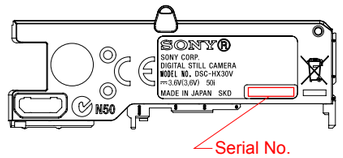
Part No.	Description
A-1878-204-A	CABINET (BOTTOM)

DSC-HX30V (CND Model)



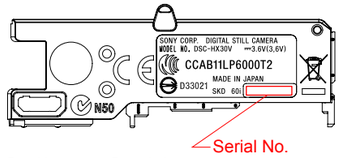
Part No.	Description
A-1878-205-A	CABINET (BOTTOM)

DSC-HX30V (HK Model)



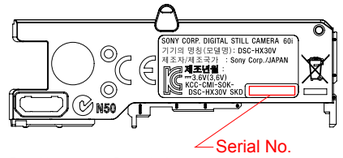
Part No.	Description
A-1878-211-A	CABINET (BOTTOM) (BLACK)
A-1878-212-A	CABINET (BOTTOM) (BROWN)

DSC-HX30V (TW Model)



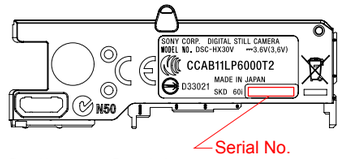
Part No.	Description
A-1878-207-A	CABINET (BOTTOM) (BLACK)
A-1878-210-A	CABINET (BOTTOM) (BROWN)

DSC-HX30V (KR Model)



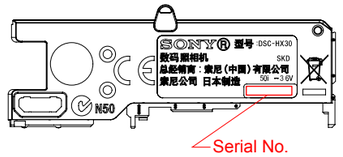
Part No.	Description
A-1878-206-A	CABINET (BOTTOM) (BLACK)
A-1878-209-A	CABINET (BOTTOM) (BROWN)

DSC-HX30V (J Model)



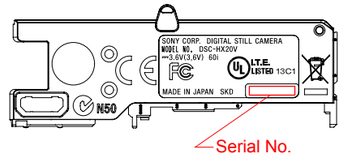
Part No.	Description
A-1878-203-A	CABINET (BOTTOM) (BLACK)
A-1878-208-A	CABINET (BOTTOM) (BROWN)

DSC-HX30 (CH Model)



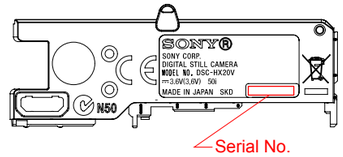
Part No.	Description
A-1878-213-A	CABINET (BOTTOM) (BLACK)
A-1878-214-A	CABINET (BOTTOM) (BROWN)

DSC-HX20V (US Model)



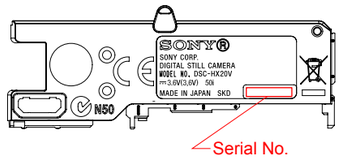
Part No.	Description
A-1878-215-A	CABINET (BOTTOM)

DSC-HX20V (AEP, UK, E, AUS Model) (BLACK)



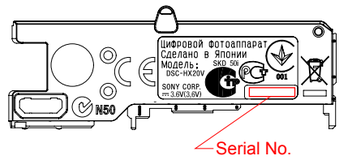
Part No.	Description
A-1878-218-A	CABINET (BOTTOM) (BLACK)

DSC-HX20V (AEP, UK, E Model) (BROWN)



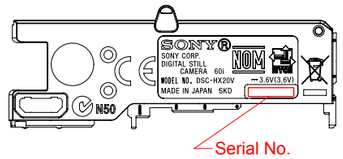
Part No.	Description
A-1878-224-A	CABINET (BOTTOM) (BROWN)

DSC-HX20V (AEP Model) (BLACK)



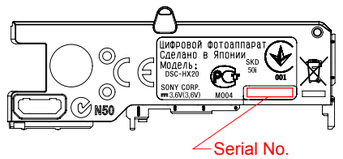
Part No.	Description
A-1878-220-A	CABINET (BOTTOM)

DSC-HX20V (E Model)



Part No.	Description
A-1878-216-A	CABINET (BOTTOM) (BLACK)
A-1878-217-A	CABINET (BOTTOM) (BROWN)

DSC-HX20 (AEP Model) (BLACK)



Part No.	Description
A-1891-788-A	CABINET (BOTTOM)

Ver. 1.1 2012.05
The changed portions from
Ver. 1.0 are shown in blue.

– ENGLISH –

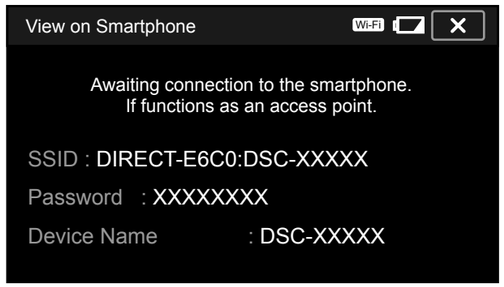
1-8. CHECKING THE Wi-Fi FUNCTION

Perform the following procedure to check the Wi-Fi function.

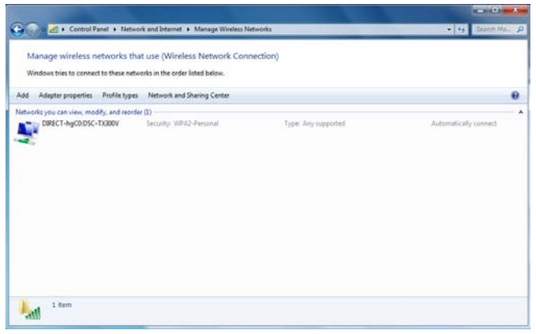
Required equipment: Windows personal computer with Wi-Fi interface

1. Turn on the power of the unit.
2. Touch the Play button to display the captured image.
3. Touch the Wi-Fi button to display the smartphone transfer screen.
4. Touch “This image” on the smartphone transfer screen to open the “Wi-Fi Standby…” screen.
5. When preparation for Wi-Fi has been completed, the “It functions as an access point. ” screen opens and a password for Wi-Fi connection is displayed.

Or when preparation for Wi-Fi has been completed, the following screen opens and a password for Wi-Fi connection is displayed.



6. Confirm on the personal computer that the unit is detected as a connectable wireless network.
7. To further confirm that the unit is connectable, connect the unit to the personal computer and select “Network and Internet” → “Manage Wireless Networks” from Control Panel to open the network connection list. The unit is included in the list.


Control Panel ▸ Network and Internet ▸ Manage Wireless Networks
Manage wireless networks that use (Wireless Network Connection)
Windows tries to connect to these networks in the order listed below.
Add
Adapter properties
Profile types
Network and Sharing Center
Networks you can view, modify, and reorder (1)
DIRECT-hgC0:DSC-TX300V
Security: WPA2-Personal
Type: Any supported
Automatically connect
1 item

– JAPANESE –

1-1. SY-325基板交換時の注意

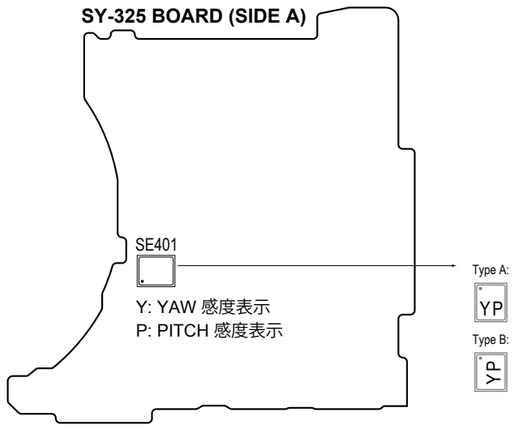
仕向けデータ
補修用基板と交換する時，補修用基板に書かれている仕向けデータは元の設定と違っている場合があります。
Adjust StationからAdjust Manualを起動させて「DESTINATION DATA WRITE」を実行させてください。

リストアデータ
補修用基板と交換する時，交換前の基板よりデータを取得してください。
データの取得はAdjust StationからAdjust Manualを起動させて「RESTORE DATA」を実行させてください。
本機で取得されるデータは下記になります。
- USB SERIAL No.
- Wide Limit Data
- Angular Velocity Sensor sensitivity adjustment
- AWB standard data input & check, Color reproduction check
- Strobe adjustment

PlayMemories Homeについて
本機の内蔵メモリー内にはPlayMemories Homeが書き込まれています。
補修用SY-325基板は，PlayMemories Homeが書き込まれた状態で供給されます。

USBシリアルNo.
セットは，1台毎に異なる固有のID（USB Serial No.）を書き込んだ後，出荷されています。
新品の補修用基板には，このIDが書き込まれていないので，基板交換後にIDを入力する必要があります。
Adjust StationからAdjust Manualを起動させて「USB SERIAL No. INPUT」を実行させてください。

角速度センサ
補修用基板と交換する時，角速度センサ（SE401）の感度表示を書き留めてください。
Adjust StationからAdjust Manualを起動させて「Angular velocity sensor sensitivity adj.」を実行させてください。



Note：SY-325基板のSE401感度表示は補修用基板にしか記載されておりません。

1-2. Destination Data ファイルの追加について

Adjust manual に含まれる Destination Data ファイルが古い場合,「DESTINATION DATA WRITE」が実行できないことがあります。
その場合は，下記の手順を参考にして，TISS ホームページより新しい Destination Data ファイル を入手してください。

Note1： この機種で仕向け設定を行うには，DSC-WX50シリーズの Adjust manual がインストールされている必要があります。
先に DSC-WX50 シリーズの Adjust manual をインストールしてください。

Note 2： 手順中の画像は実際と異なる場合があります。

1) 使用している Adjust manual の Destination Data ファイルが古い場合，Fig. 1 のようなウインドウが表示される。
[OK] ボタンをクリックする。

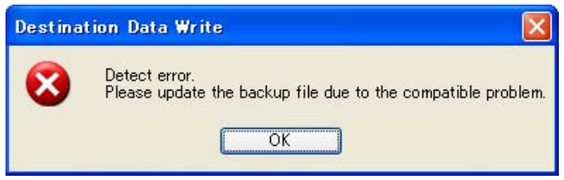
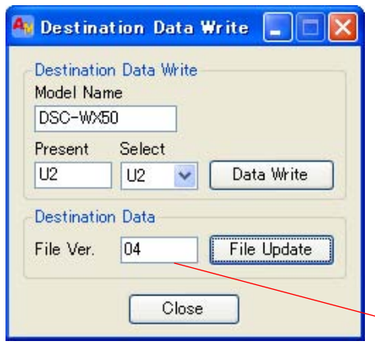


Fig. 1

2) Destination Data Write ウインドウが表示される。
Adjust manual の保持している Destination Data ファイル のバージョンを確認する。



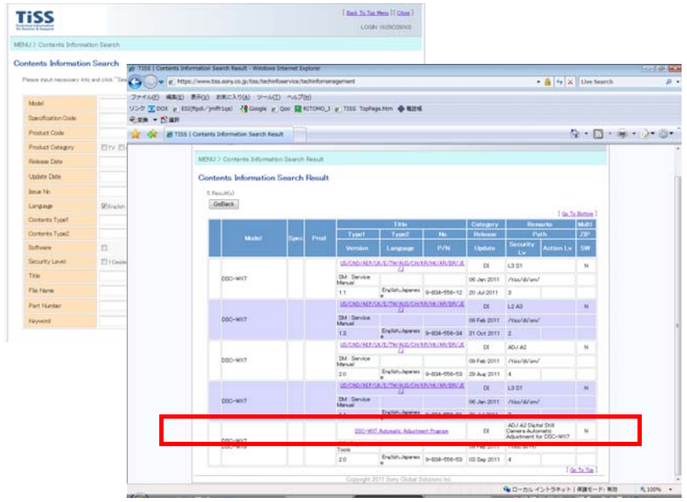
Destination Ver. ウインドウ

3) TISSホームページにて，新しい Destination Data ファイルを入手したい機種を検索する。
Destination Data ファイルが更新されている場合，「Destination File For "機種名".zip」という名称のファイルが登録されている。

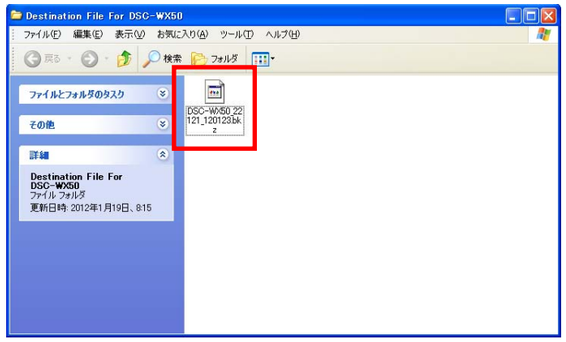
(例) Destination File For DSC-WX50.zip

また，Remarks欄にはこの Destination Data ファイルが対応するバージョンが記載されています。

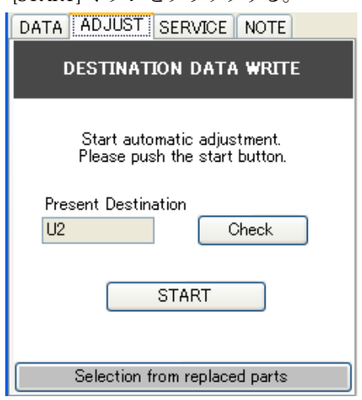
Note：バージョンが更新されていなかった場合は，サービスヘッドクォーターへお問い合わせください。



4) 該当機種の Destination Data ファイルをダウンロードし，解凍する。

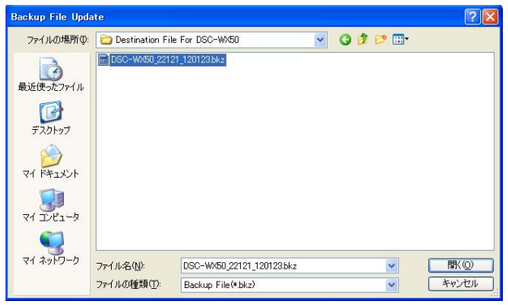


5) Adjust manual の Adjust タブにある，「DESTINATION DATA WRITE」を実行する。
[START] ボタンをクリックする。



6) ウインドウ内の [File Update] ボタンをクリックする。

7) ファイルを選択する画面が出るので，追加する Destination Data ファイルを選択し，[開く] ボタンをクリックする。



8) ファイルの追加が成功すると，下記のような画面が出る。

9) Destination Ver. ウインドウを確認し，バージョンが更新されていることを確認する。

1-3. 内蔵メモリーのデータコピーおよび消去方法

内蔵メモリーのデータコピーまたは消去はホーム画面の操作から実行可能です。(消去する場合は内蔵メモリーの初期化を行います。)

Note1：SY-325基板交換の際は，基板交換前に内蔵メモリーのデータを消去して下さい。
Note2：SY-325基板交換の際は，基板交換後に内蔵メモリーのフォーマットおよび初期化を実行して下さい。

内蔵メモリーのコピー方法

コピー

内蔵メモリーに記録した画像を、メモリーカードに一括コピーします。

1. 充分な空き容量のあるメモリーカードを本機に入れる
2. MENU → （設定） → （メモリーカードツール） → ［コピー］ → ［OK］ → 中央の ●

ご注意

- 充分に充電したバッテリーをご使用ください。残量の少ないバッテリーを使用して画像ファイルをコピーすると、バッテリー切れのためデータを転送できなかったり、データを破損するおそれがあります。
- 画像ごとのコピーはできません。
- データをコピーしても、内蔵メモリー内のデータは削除されません。内蔵メモリーの内容を消去するには、コピー後にメモリーカードを本体から取りはずし、［内蔵メモリーツール］の［フォーマット］を行ってください。
- データをコピーすると、現在の指定している記録フォルダに一番最後のファイル番号でコピーされます。

内蔵メモリー、もしくはメモリーカードのフォーマット方法

フォーマット

メモリーカード、または内蔵メモリーをフォーマット（初期化）します。
メモリーカードの動作を安定させるために、メモリーカードを本機ではじめてお使いになる場合には、まず、本機でフォーマットすることをおすすめします。フォーマットすると、メモリーカードに記録されている全てのデータは消去され、元に戻すことはできません。大切なデータはパソコンなどに保存しておいてください。

1. MENU → （設定） → （メモリーカードツール）、または（内蔵メモリーツール） → ［フォーマット］ → ［OK］ → 中央の ●

ご注意

- フォーマットすると、プロテクトしてある画像も含めて、すべてのデータが消去され、元に戻せません。

1-4. 内蔵メモリーへデータを書き戻す方法

通常は，PCからカメラの内蔵メモリへデータを書き込むことはできない設定になっています。
基板交換後などに，内蔵メモリへデータを書き戻す場合には，この設定を一時的に変更する必要があります。
設定の変更は，Adjust StationからAdjust Manualを起動させて書き込み許可ツール(Write Enable Tool)を使用します。

書き戻し方法

1) Adjust StationからAdjust Manualを起動する。
2) (Write Enable Tool)ボタンをクリックする。
3) “Activate Write Enable Mode”ボタンをクリックする。

4) 設定の変更が終了すると，次のメッセージが表示されますので“OK”ボタンをクリックする。

5) ドライバを元に戻して、カメラとPCをマスストレージ接続する。
6) PCに読み出しておいたデータをカメラの内蔵メモリに書き込む。
7) カメラとPCの接続を解除し，カメラの電源をOFFにする。

注意：カメラの電源をOFFにすることにより，書き込み許可の設定が解除されます。

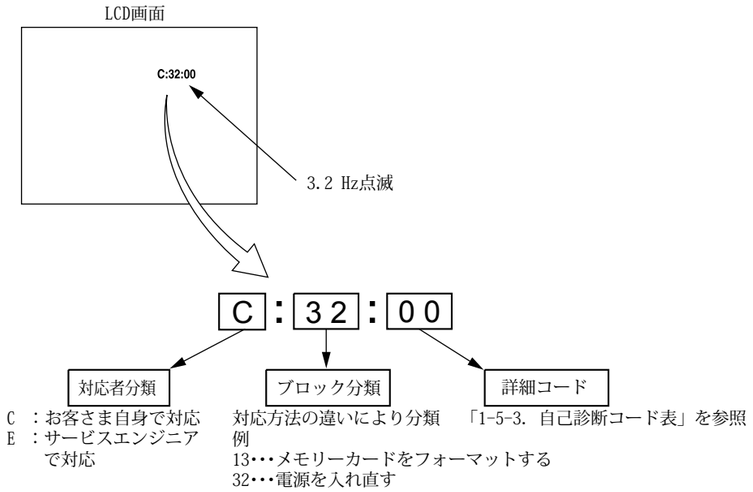
1-5. 自己診断機能

1-5-1. 自己診断機能について

本機の動作に不具合が生じたとき，自己診断機能が働き，LCD画面に，どう処置したらよいか判断できる表示を行います。自己診断機能については取扱説明書にも掲載されています。

1-5-2. 自己診断表示

本機の動作に不具合が生じたとき，LCD画面にアルファベットと4桁の数字が表示され，3.2Hzで点滅します。この5文字の表示によって対応者分類および不具合の生じたブロックの分類，不具合の詳細コードを示します。



1-5-3. 自己診断コード表

自己診断コード				症状／状態	対応／方法
対応者	ブロック機能		詳細コード		
C	1	3	0 1	内蔵メモリーに メディアエラー があった。	電源を入れ直す。
				内蔵メモリにフォーマットエラーがあった。	内蔵メモリをフォーマットする。
				フォーマットしていないメモリーカードを入れた。	メモリーカードをフォーマットする。
				メモリーカードが壊れている。	新しいメモリーカードに交換する。
				メモリーカードのタイプエラーを検出した。	規格内のメモリーカードを挿入する。
				メモリーカードが読み／書きできない。	電源の入れ直し，またはメモリーカードの挿し／外しを数回試す。
C	3	2	0 1	ハードウェアトラブルを検出した。	電源を入れ直す。
E	4	1	0 0*	ネットワーク制御マイコンの異常。	電源を入れ直す。
E	4	1	0 1*	ネットワーク制御デバイスの異常。	電源を入れ直す。
E	6	1	0 0	フォーカスが合いにくい。 （フォーカスの初期化ができない）	操作スイッチの電源を入れ直す。 復帰しない場合はレンズブロックのフォーカスリセットセンサ（SY-325基板CN405 ㊲, ㊴ピン）を点検する。異常なければフォーカスモータ駆動IC（SY-325基板IC401）を点検する。
E	6	1	1 0	ズーム動作の異常。 （ズームレンズの初期化ができない）	操作スイッチの電源を入れ直す。 ズームボタンを操作したときにズーム動作をすればレンズブロックのズームリセットセンサ（SY-325基板CN405 ㉑ピン）を点検する。異常なければズームモータ駆動IC（SY-325基板IC401）を点検する。
E	6	1	3 0	ステッパIRISイニシャル時リセット位置検出異常	電源を入れ直す。
E	6	2	0 2	手振れ補正用ICの異常。	手振れ補正用IC（SY-325基板IC401）を点検または交換する。
E	6	2	1 0	手振れ補正用ICの異常。 （レンズ初期化異常）	手振れ補正用IC（SY-325基板IC401）を点検または交換する。
E	6	2	1 1	レンズオーバーヒート（PITCH）	光学手振れ補正ブロックのホール素子（PITCH）（SY-325基板CN405 ⑨, ⑪ピン）を点検する。 異常なければPITCH角速度センサ（SY-325基板SE401）周辺の回路を点検する。
E	6	2	1 2	レンズオーバーヒート（YAW）	光学手振れ補正ブロックのホール素子（YAW）（SY-325基板CN405 ⑱, ⑳ピン）を点検する。 異常なければYAW角速度センサ（SY-325基板SE401）周辺の回路を点検する。
E	6	2	2 0	サーミスタの異常。	光学手振れ補正ブロックの温度センサ（SY-325基板CN405 ⑧ピン）を点検する。
E	9	1	0 1	フラッシュの充電異常。	フラッシュユニットを点検または交換する。（Note 1）
E	9	4	0 0	内蔵メモリーの書き込み/消去動作不良	内蔵メモリー （SY-325基板IC211)を点検する。
E	9	5	0 0	GPSハードウェア異常	SY-325基板とRL-129基板をつないでいるRL-130フレキシブル基板が切れていないか，また完全に挿入されているかを点検する。フレキシブル基板に問題がない場合は，SY-325基板またはRL-129基板の点検または交換をする。
E	9	5	0 1	加速度センサーハードウェア異常 （GPSハードウェア異常）	SY-325基板とRL-129基板をつないでいるRL-130フレキシブル基板が切れていないか，また完全に挿入されているかを点検する。フレキシブル基板に問題がない場合は，SY-325基板またはRL-129基板の点検または交換をする。
E	9	5	0 2	地磁気センサーハードウェア異常 （GPSハードウェア異常）	SY-325基板とRL-129基板をつないでいるRL-130フレキシブル基板が切れていないか，また完全に挿入されているかを点検する。フレキシブル基板に問題がない場合は，SY-325基板またはRL-129基板の点検または交換をする。

Note 1：交換後は，必ず「1-6. フラッシュエラー発生時の対処法」を行って下さい。
Note 2：*マークのコードは本機には実装されていない機能です。

1-6. フラッシュエラー発生時の対処法

本機はフラッシュエラー（自己診断コードE：91：01）が発生した場合，高電圧による異常を防止するために自動的にフラッシュ充電および発光禁止の設定になります。
フラッシュエラー発生後はエラーの解除を行う必要があります。エラーの解除はホーム画面から行います。

フラッシュエラーの解除方法

Flash Error Repair Tool Ver_[].[].exe を使用して Flash Error を解除してください。

Ver. 1.2 2012.06
The changed portions from
Ver. 1.1 are shown in blue.

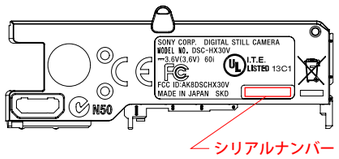
1-7. キャビネット(底)交換時の注意

1-7-1. キャビネット(底)注文時の注意

機種の表示部はレーザー印字方式を採用しております。
この為，交換用のキャビネット(底)は機種，仕向けにより異なります。類似の表示もありますので，該当するものを選んで注文してください。

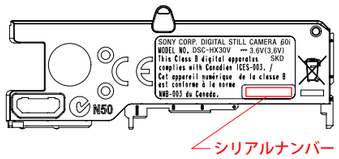
注意： キャビネット(底)交換後はシリアルナンバーがサービス専用のシリアルナンバーに変更されます。お客様への案内と修理データのシリアルナンバー変更を行ってください。

DSC-HX30V (US 仕向)



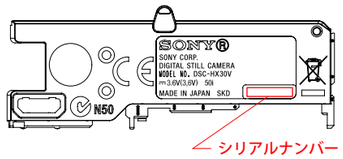
Part No.	Description
A-1878-204-A	CABINET (BOTTOM)

DSC-HX30V (CND 仕向)



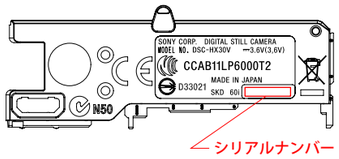
Part No.	Description
A-1878-205-A	CABINET (BOTTOM)

DSC-HX30V (HK 仕向)



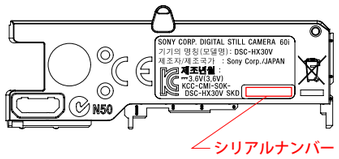
Part No.	Description
A-1878-211-A	CABINET (BOTTOM) (BLACK)
A-1878-212-A	CABINET (BOTTOM) (BROWN)

DSC-HX30V (TW 仕向)



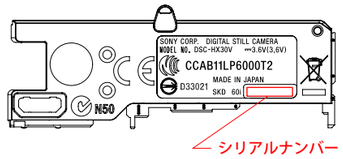
Part No.	Description
A-1878-207-A	CABINET (BOTTOM) (BLACK)
A-1878-210-A	CABINET (BOTTOM) (BROWN)

DSC-HX30V (KR 仕向)



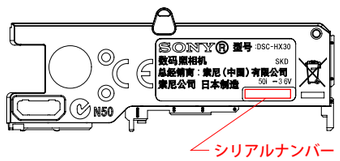
Part No.	Description
A-1878-206-A	CABINET (BOTTOM) (BLACK)
A-1878-209-A	CABINET (BOTTOM) (BROWN)

DSC-HX30V (J 仕向)



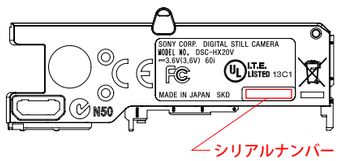
Part No.	Description
A-1878-203-A	CABINET (BOTTOM) (BLACK)
A-1878-208-A	CABINET (BOTTOM) (BROWN)

DSC-HX30 (CH 仕向)



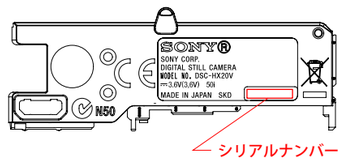
Part No.	Description
A-1878-213-A	CABINET (BOTTOM) (BLACK)
A-1878-214-A	CABINET (BOTTOM) (BROWN)

DSC-HX20V (US 仕向)



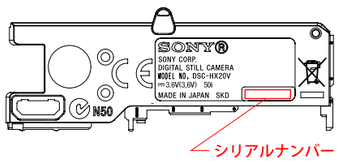
Part No.	Description
A-1878-215-A	CABINET (BOTTOM)

DSC-HX20V (AEP, UK, E, AUS 仕向) (ブラック)



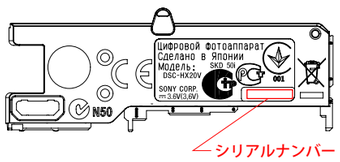
Part No.	Description
A-1878-218-A	CABINET (BOTTOM) (BLACK)

DSC-HX20V (AEP, UK, E 仕向) (ブラウン)



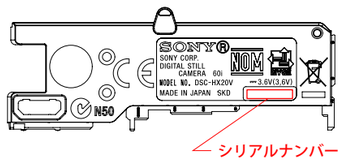
Part No.	Description
A-1878-224-A	CABINET (BOTTOM) (BROWN)

DSC-HX20V (AEP 仕向) (ブラック)



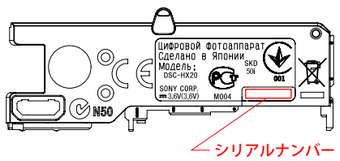
Part No.	Description
A-1878-220-A	CABINET (BOTTOM)

DSC-HX20V (E 仕向)



Part No.	Description
A-1878-216-A	CABINET (BOTTOM) (BLACK)
A-1878-217-A	CABINET (BOTTOM) (BROWN)

DSC-HX20 (AEP 仕向) (ブラック)



Part No.	Description
A-1891-788-A	CABINET (BOTTOM)

DSC-HX20/HX20V/HX30/HX30V_L2

1-8. Wi-Fi機能の確認

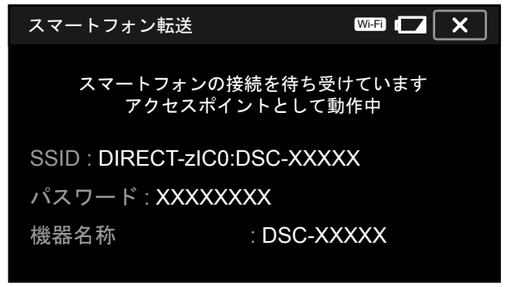
Wi-Fi 機能を確認するときは以下の手順で行ってください。

用意する機器: Wi-Fi接続の可能なWindowsパソコン

1. 本機の電源を入れる。
2. 再生ボタンをタッチして撮影済みの画像を表示する。
3. Wi-Fiボタンをタッチするとスマートフォン転送画面が表示される。
4. スマートフォン転送画面から「この画像」をタッチすると「Wi-Fi準備中」の画面に切り替わる。
5. Wi-Fi準備が完了すると「アクセスポイントとして動作中」という画面に切り替わり、Wi-Fi接続のためのパスワードが表示される。

または

Wi-Fi準備が完了すると以下の画面に切り替わり、Wi-Fi接続のためのパスワードが表示される。



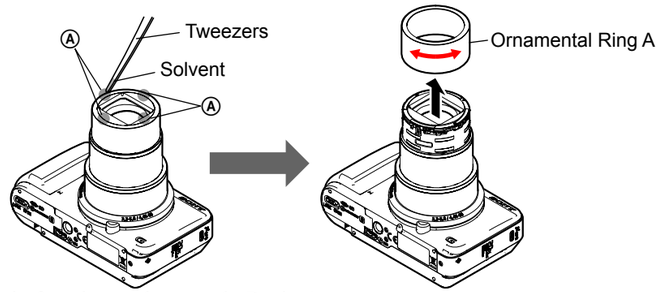
6. パソコン側で接続可能なワイヤレスネットワークとして、本機が検出されることを確認する。
7. さらに接続可能なことを確認したい場合には本機とパソコンを接続後、コントロールパネルの「ネットワークとインターネット」→「ワイヤレスネットワークの管理」からネットワーク接続リストを開くと、リストに本機が表示される。

Ver. 1.1 2012.05
The changed portions from
Ver. 1.0 are shown in blue.

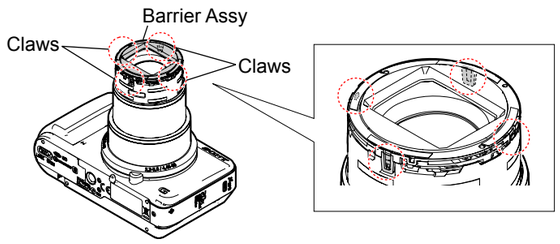
1-9. ORNAMENTAL RING A OR BARRIER ASSY REPLACING METHOD

Removal

Turn on the power switch and extend the lens (TELE end).
Detach the battery.
Apply alcohol to four gaps Ⓐ of the Ornamental Ring A with tweezers or a fine-tipped stick as shown below.
Turn the Ornamental Ring A clockwise and counterclockwise to detach it.

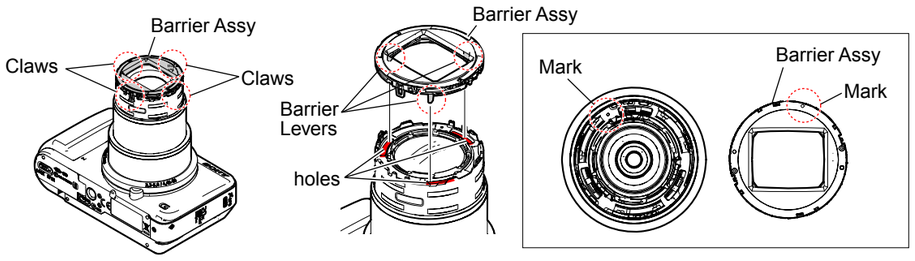


Disengage the four claws and remove the Barrier Assy.

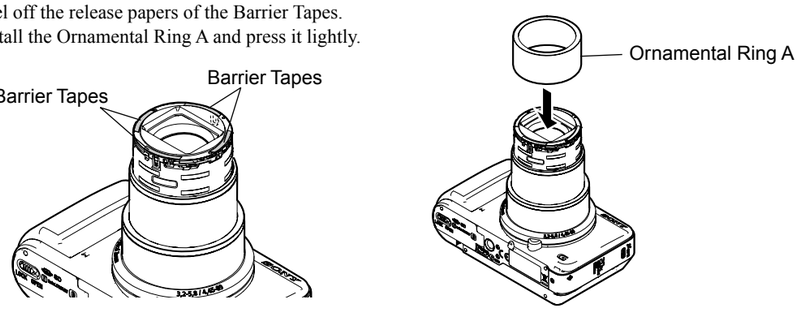


Installation

Fit the four claws while inserting the Barrier Lever into the hole and attach the Barrier Assy.
Note: The Barrier Tapes must not be wrinkled.



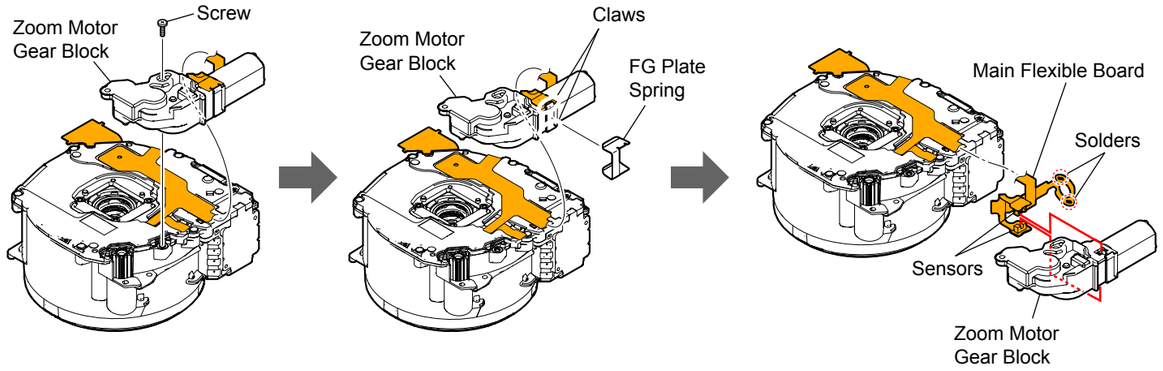
Peel off the release papers of the Barrier Tapes.
Install the Ornamental Ring A and press it lightly.



1-10. ZOOM MOTOR GEAR BLOCK REPLACING METHOD

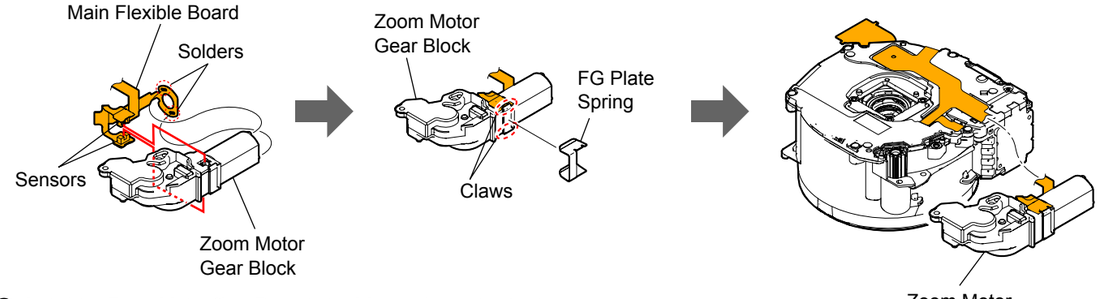
Removal

① Remove the screw and remove the Zoom Motor Gear Block from the Main body.
② Remove the FG Plate Spring while disengaging the two Claws.
③ Pull the two Sensors out of the Zoom Motor Gear Block.
④ Remove solder at two locations to detach the Zoom Motor Gear Block from the Main Flexible Board.

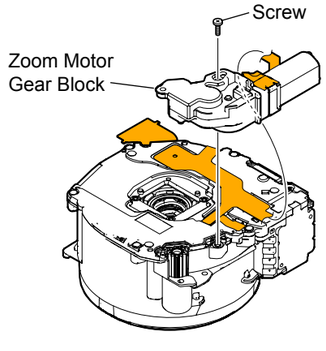


Installation

① Solder the Main Flexible Board at two locations and insert the two Sensors into the Zoom Motor Gear Block.
② Install the FG Plate Spring while engaging the two Claws.



③ Install the Zoom Motor Gear Block to the Main body and tighten the screw.

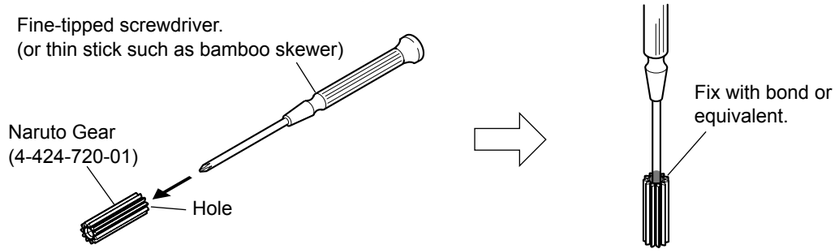


Ver. 1.1 2012.05
The changed portions from
Ver. 1.0 are shown in blue.

1-11. CAM TUBE (B) ASSY REPLACING METHOD

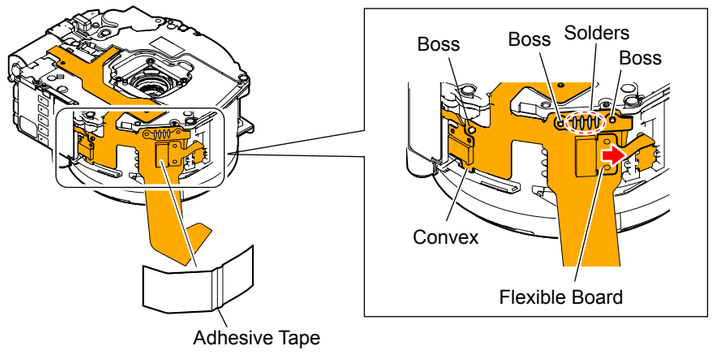
Creation of Naruto Gear jig

Prepare a Naruto Gear (4-424-720-01) and a fine-tipped screwdriver (or thin stick such as bamboo skewer).
Insert a fine-tipped screwdriver (or thin stick such as bamboo skewer) into the Naruto Gear hole and fix the Naruto Gear and the screwdriver with bond or equivalent.

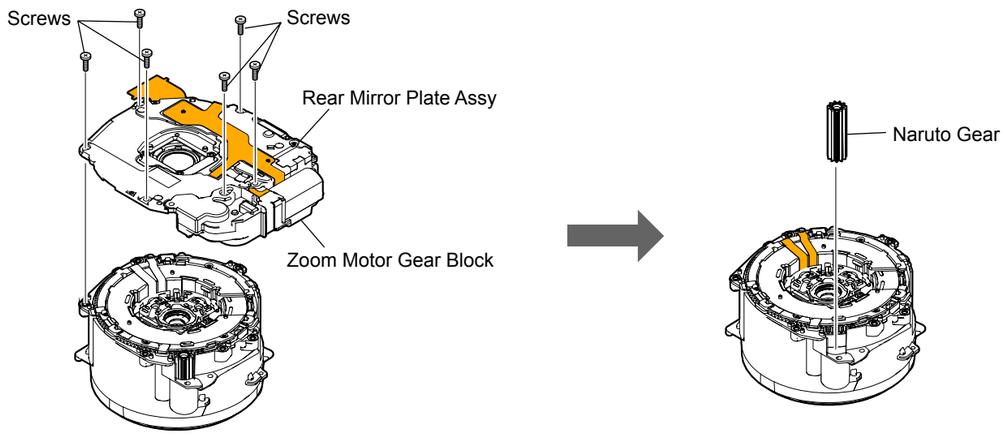


Removal

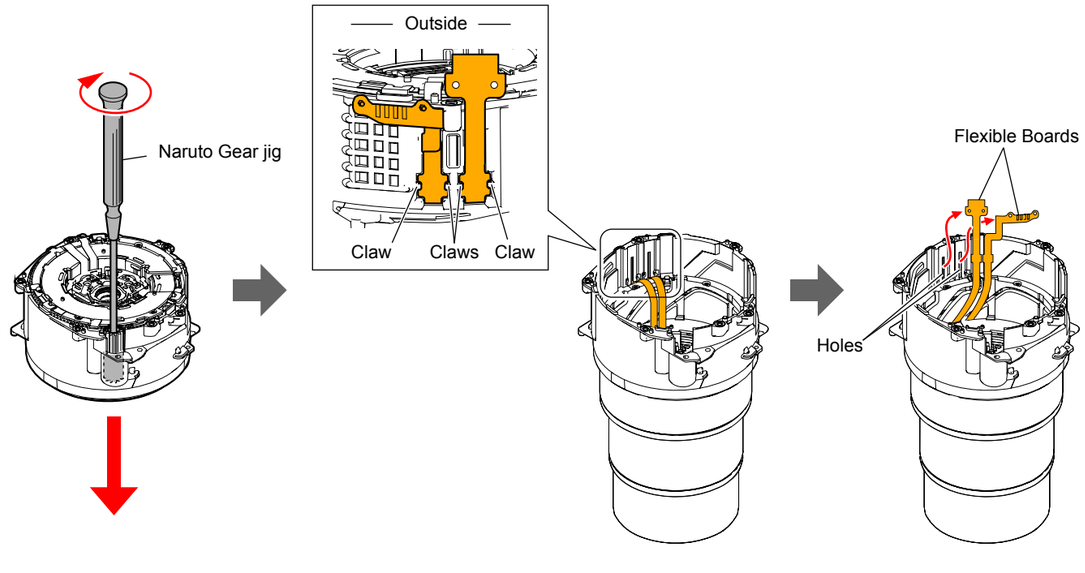
① Peel off the Adhesive Tape.
Note: Removed Adhesive Tape must not be reused. Use new Adhesive Tape.
② Disconnect the Flexible Board from the Connector.
③ Remove solder at four locations to detach the three Bosses and the Convex on the Flexible Board.



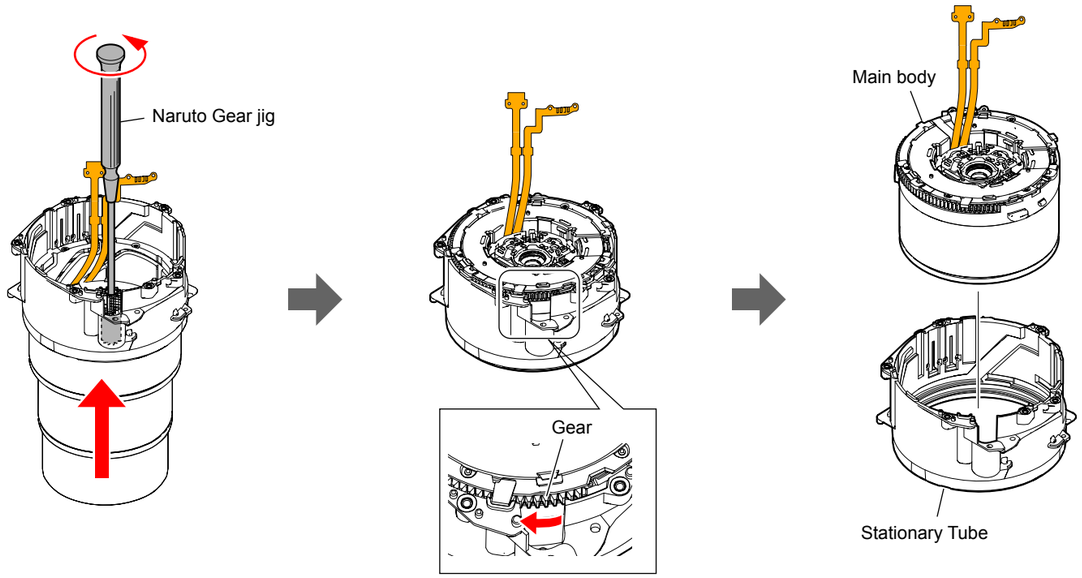
④ Remove the six screws and remove the Rear Mirror Plate Assy and the Zoom Motor Gear Block.
⑤ Pull out the Naruto Gear.



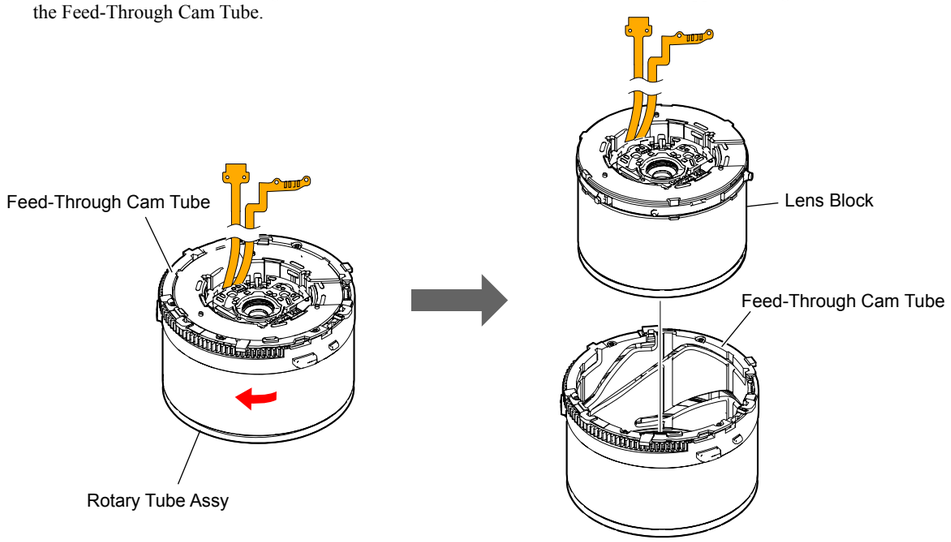
⑥ Turn the Naruto Gear jig clockwise to set the Main body at TELE end.
Note: Turn the Naruto Gear jig to the maximum.
⑦ Disengage the four Convexes on the Flexible Boards from the four Claws and pull the Flexible Boards out of the holes.



⑧ Turn the Naruto Gear jig counterclockwise to set the Main body to the retracted state.
Note: Turn the Naruto Gear jig to the maximum.
⑨ Further turn the Gear clockwise (approx. 5 degrees) and remove the Stationary Tube from the Main body.

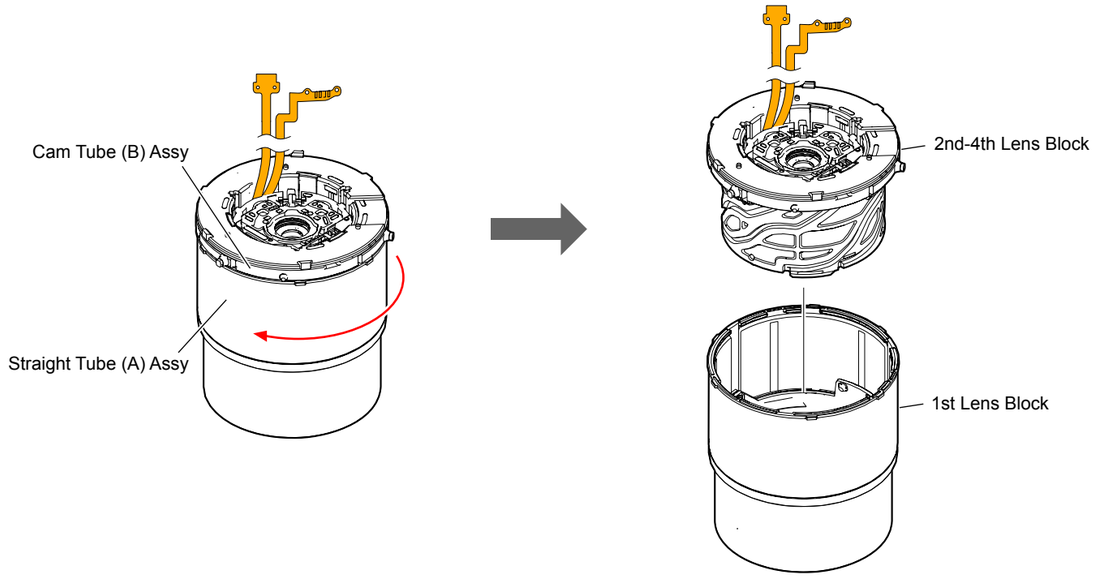


⑩ While holding the Feed-Through Cam Tube, turn the Rotary Tube Assy clockwise (approx. 5 degrees) and remove the Lens Block from the Feed-Through Cam Tube.

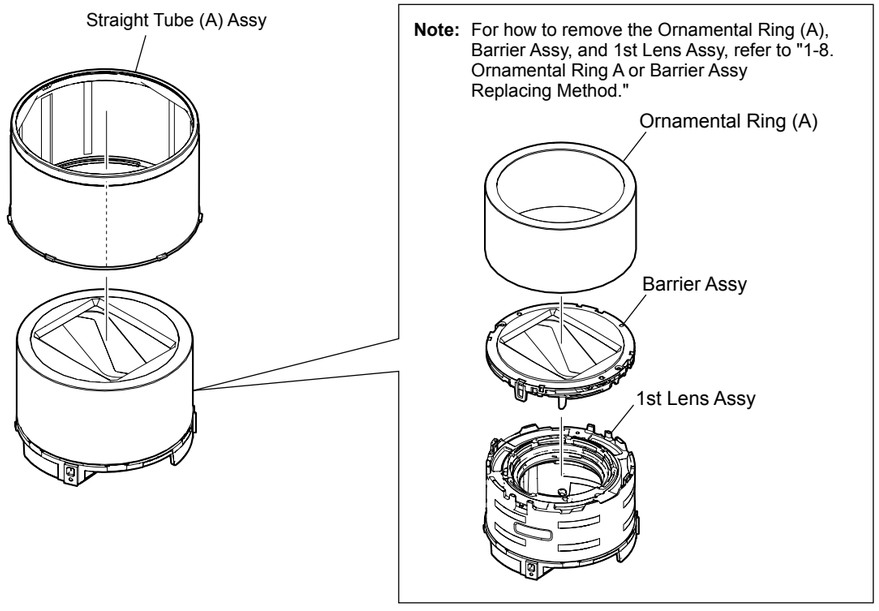


⑪ Turn the Feed-Through Cam Tube and set the Projection (large) on the Feed-Through Cam Tube and the Gear of the Rotary Tube Assy at the positions shown in the figure, and then remove the Feed-Through Cam Tube from the Rotary Tube Assy.

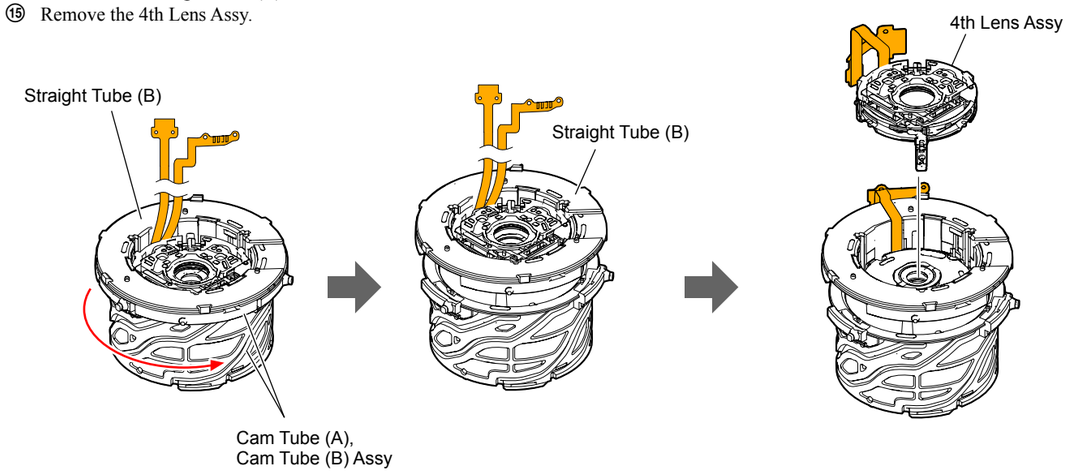
⑫ While holding the Cam Tube (B) Assy, fully turn the Straight Tube (A) Assy clockwise (approx. 120 degrees) and remove the 2nd-4th Lens Block from the 1st Lens Block.



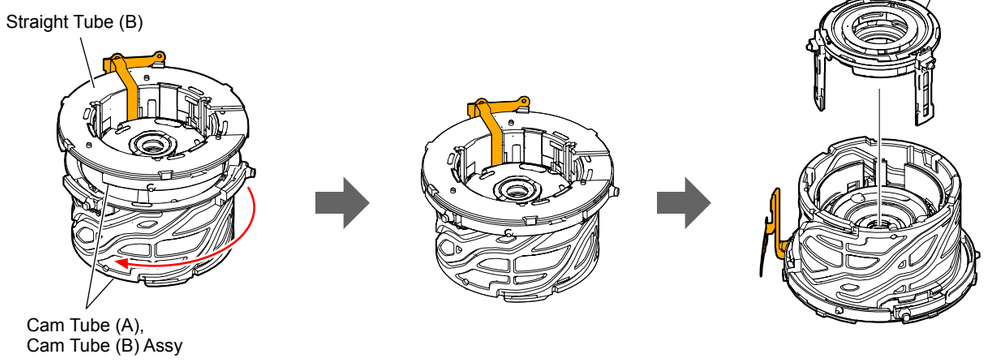
⑬ Remove the Ornamental Ring (A), Barrier Assy, and 1st Lens Assy from the Straight Tube (A) Assy.
Note: For how to remove the Ornamental Ring (A), Barrier Assy, and 1st Lens Assy, refer to "1-8. Ornamental Ring A or Barrier Assy Replacing Method."


Straight Tube (A) Assy
Note: For how to remove the Ornamental Ring (A), Barrier Assy, and 1st Lens Assy, refer to "1-8. Ornamental Ring A or Barrier Assy Replacing Method."
Ornamental Ring (A)
Barrier Assy
1st Lens Assy

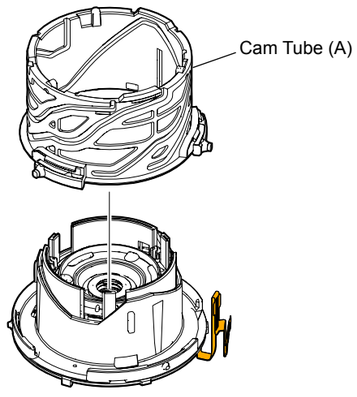
⑭ While holding the Straight Tube (B), fully turn the Cam Tube (A) and the Cam Tube (B) Assy counterclockwise (approx. 125 degrees) to extend the Straight Tube (B).
⑮ Remove the 4th Lens Assy.



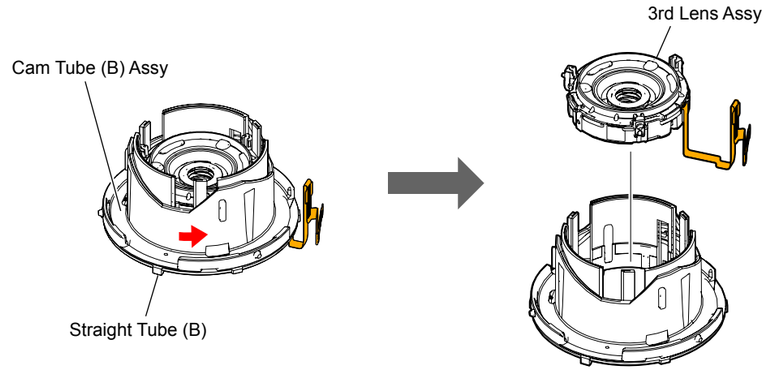
⑯ While holding the Straight Tube (B), turn the Cam Tube (A) and the Cam Tube (B) Assy clockwise (approx. 125 degrees) to set them to the retracted state.
⑰ Remove the 2nd Lens Assy from the eyepiece side.



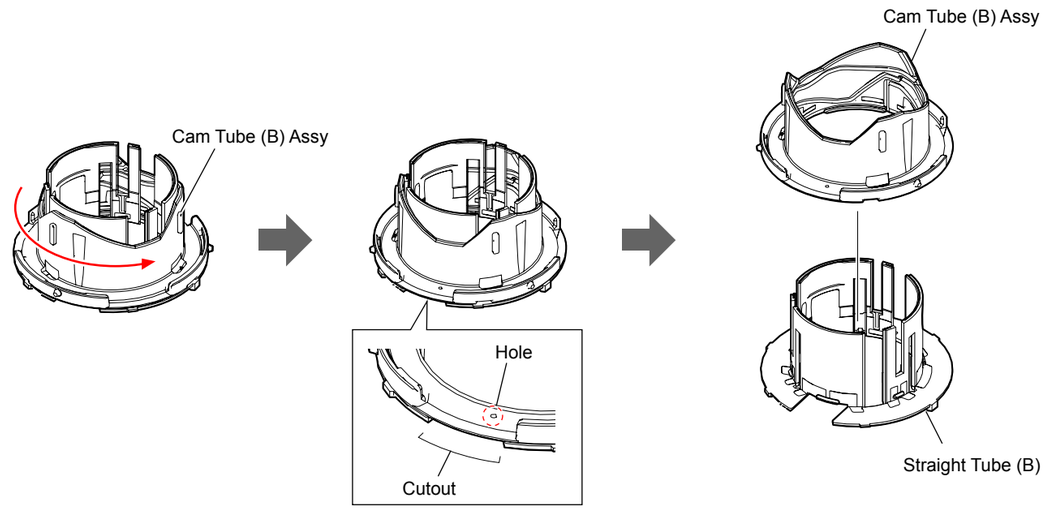
⑱ Remove the Cam Tube (A).



⑲ While holding the Straight Tube (B), fully turn the Cam Tube (B) Assy counterclockwise (approx. 3 degrees) and remove the 3rd Lens Assy from the eyepiece side.

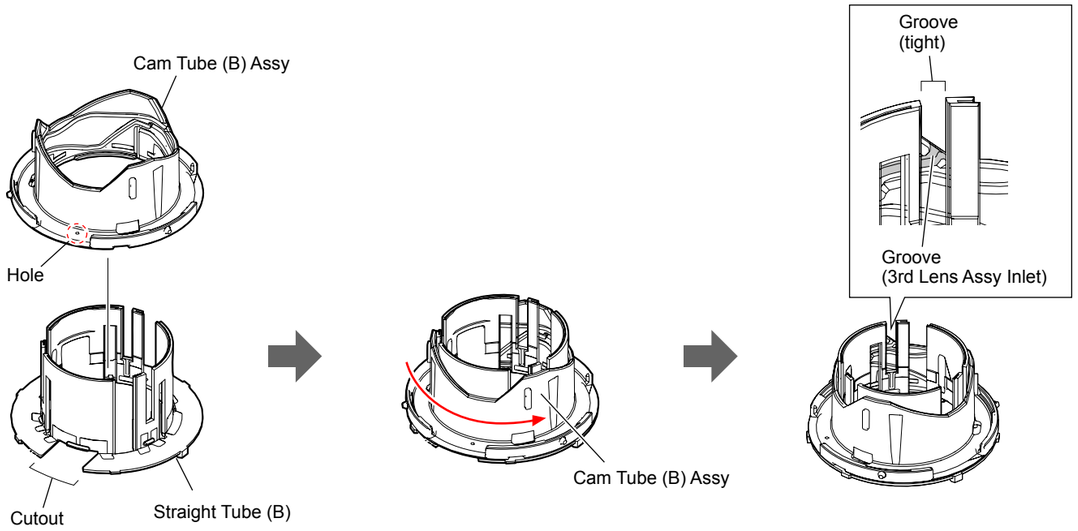


⑳ Turn the Cam Tube (B) Assy to align the Cam Tube (B) Assy hole with the cutout of the Straight Tube (B) as shown in the figure.
㉑ Detach the Cam Tube (B) Assy from the Straight Tube (B).

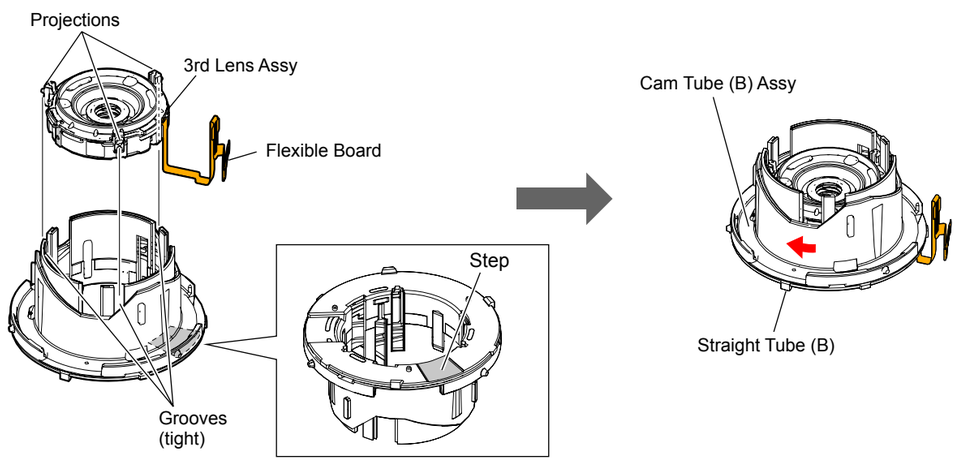


Installation

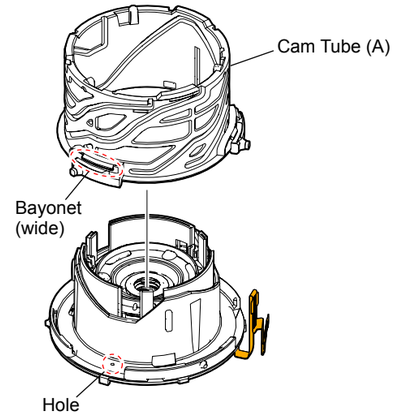
① Install the Cam Tube (B) Assy to the Straight Tube (B) with the hole aligned with the cutout.
② Turn the Cam Tube (B) Assy counterclockwise (approx. 141.5 degrees) from the assembled position to align the Groove (tight) of the Straight Tube (B) with the Groove (3rd Lens Assy Inlet) of the Cam Tube (B) Assy as shown in the figure.



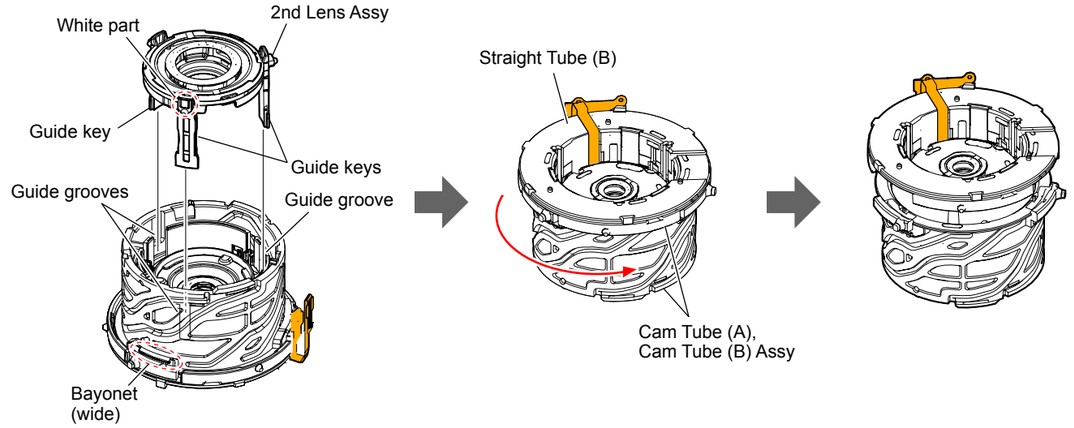
③ Align the Flexible Board with the Step as shown in the figure and install the 3rd Lens Assy while inserting the three Projections of the 3rd Lens Assy into the three Grooves (tight) of the Straight Tube (B).
④ While holding the Straight Tube (B), turn the Cam Tube (B) Assy clockwise (approx. 3 degrees) to retain the 3rd Lens Assy position.



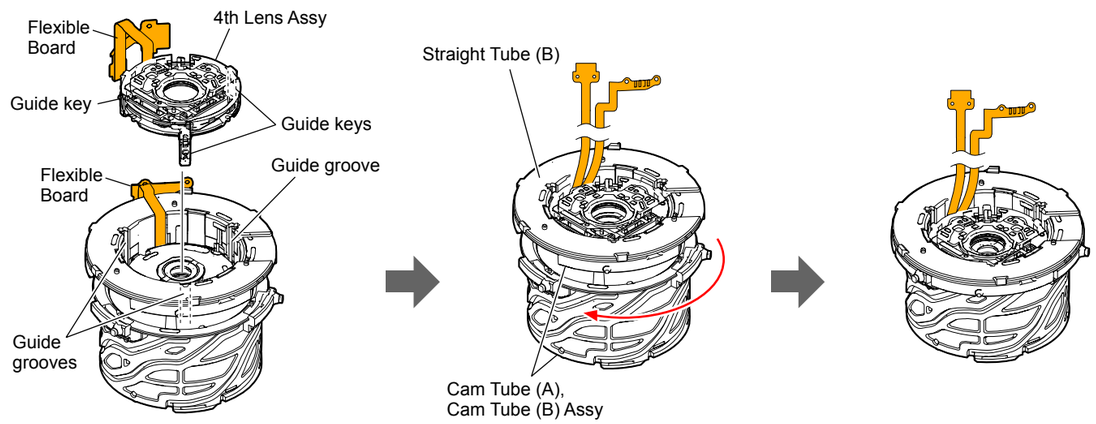
⑤ Align the Bayonet (wide) with the hole and install the Cam Tube (A).



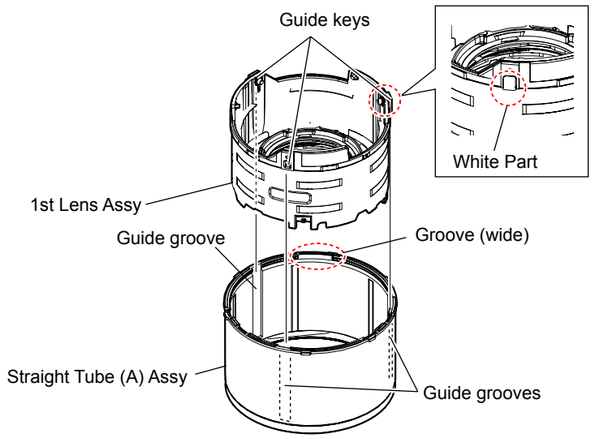
⑥ Align the White Part with the Bayonet (wide) and install the 2nd Lens Assy while inserting the three Guide keys into the three Guide grooves.
⑦ While holding the Straight Tube (B), fully turn the Cam Tube (A) and the Cam Tube (B) Assy counterclockwise (approx. 125 degrees) to set them at TELE end.



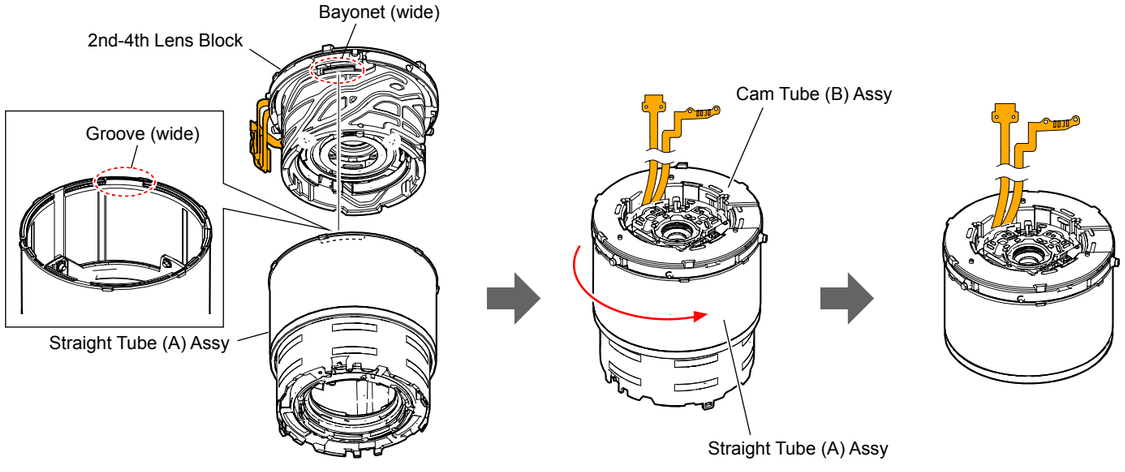
⑧ Align the Flexible Board with the Flexible Board and install the 4th Lens Assy while inserting the three Guide keys into the three Guide grooves.
⑨ While holding the Straight Tube (B), fully turn the Cam Tube (A) and the Cam Tube (B) Assy clockwise (approx. 125 degrees) to set them to the retracted state.



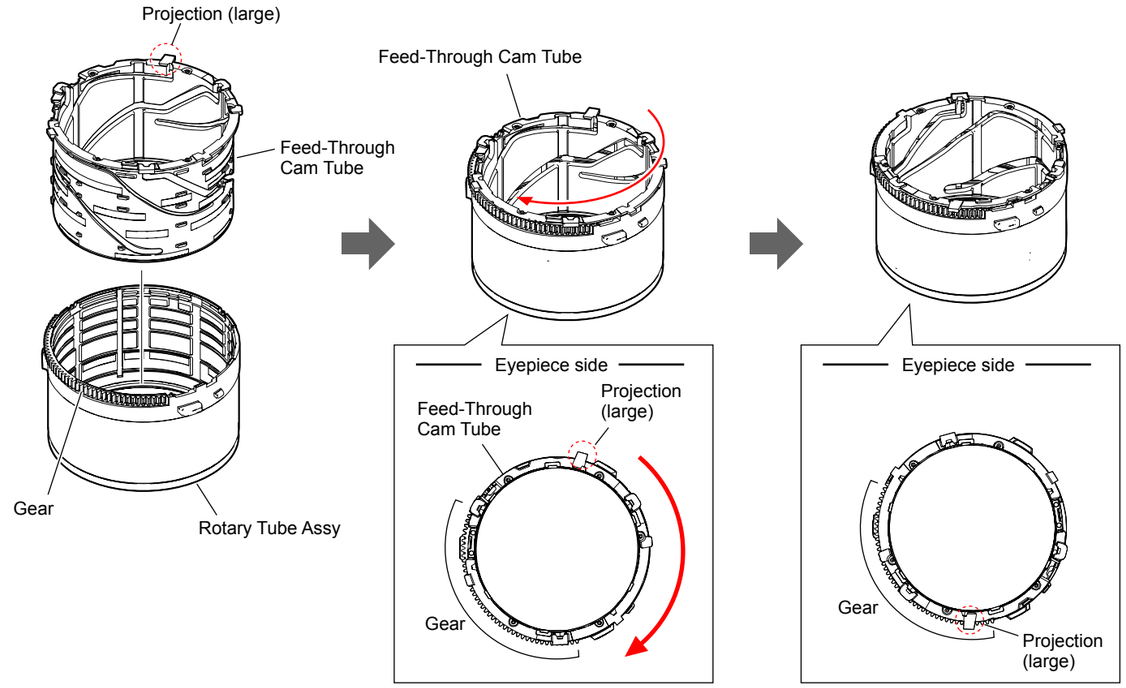
⑩ Align the White Part with the Groove (wide) as shown in the figure and install the 1st Lens Assy to the Straight Tube (A) Assy while inserting the three Guide keys into the three Guide grooves.



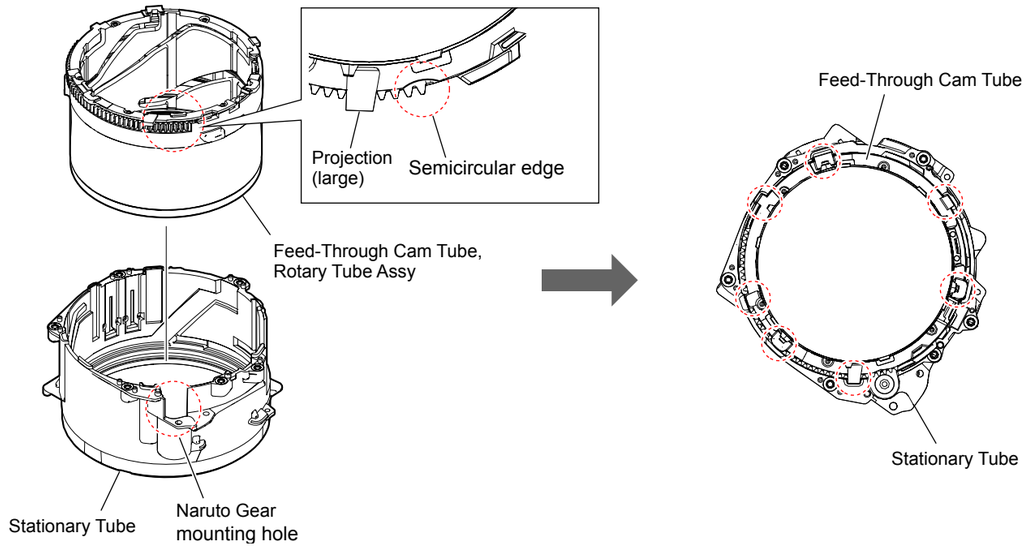
⑪ Align the Bayonet (wide) with the Groove (wide) and install the 2nd-4th Lens Block to the Straight Tube (A) Assy.
⑫ While holding the Cam Tube (B) Assy, fully turn the Straight Tube (A) Assy clockwise (approx. 120 degrees) to set it to the retracted state.



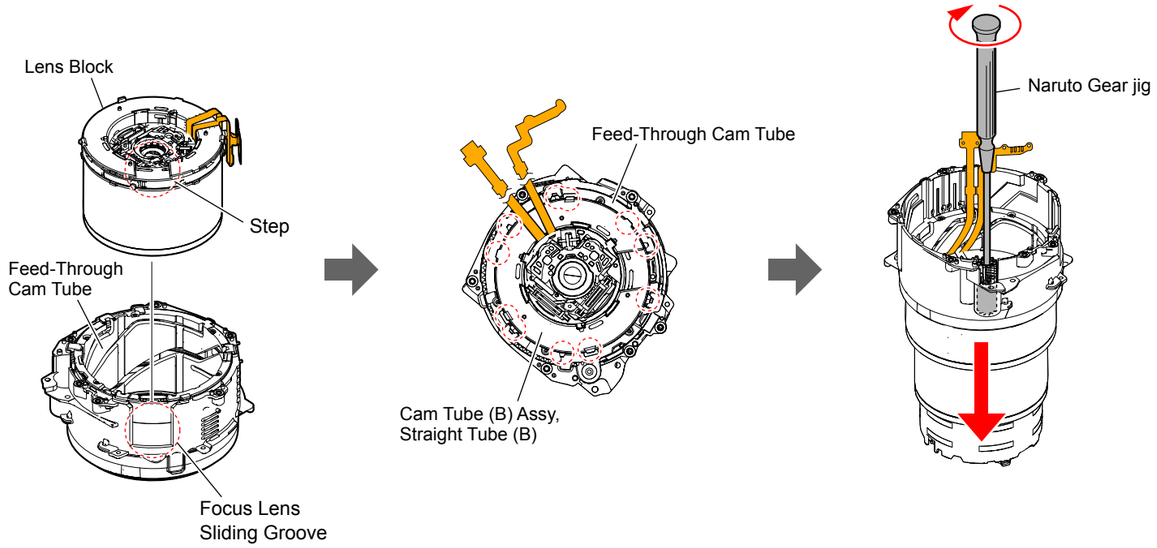
⑬ Align the Projection (large) with the Gear as shown in the figure and install the Feed-Through Cam Tube to the Rotary Tube Assy.
⑭ Turn the Feed-Through Cam Tube in the arrow direction to set the Projection (large) and the Gear to the positions shown in the figure.



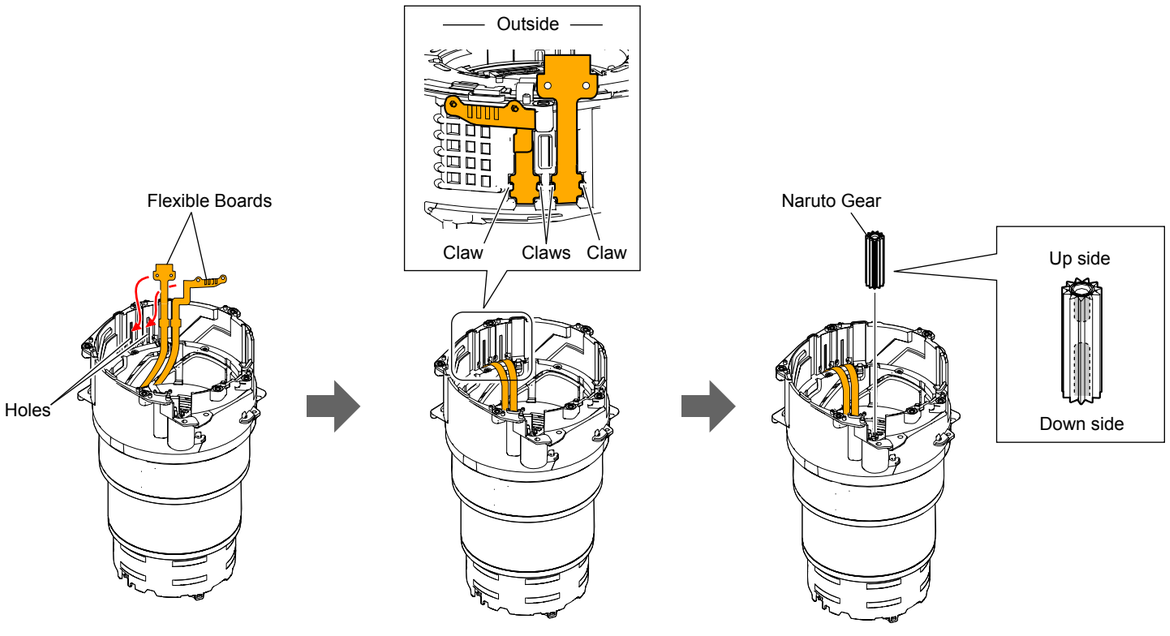
⑮ Align the semicircular edge with the Naruto Gear mounting hole as shown in the figure and install the Feed-Through Cam Tube and the Rotary Tube Assy to the Stationary Tube.
⑯ Engage the seven Projections of the Feed-Through Cam Tube with the seven Grooves of the Stationary Tube.



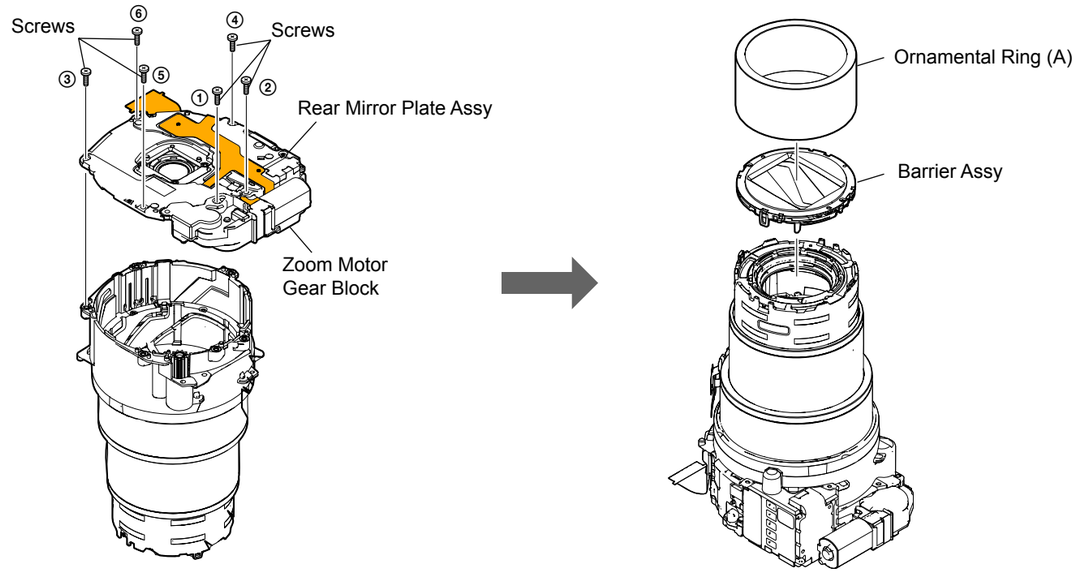
⑰ Align the Step with the Focus Lens Sliding Groove and install the Lens Block to the Feed-Through Cam Tube.
⑱ Engage the Projections of the Cam Tube (B) Assy and the Straight Tube (B) with the eleven Grooves of the Feed-Through Cam Tube.
⑲ Turn the Naruto Gear jig clockwise to set the Main body at TELE end.
Note: Turn the Naruto Gear jig to the maximum.



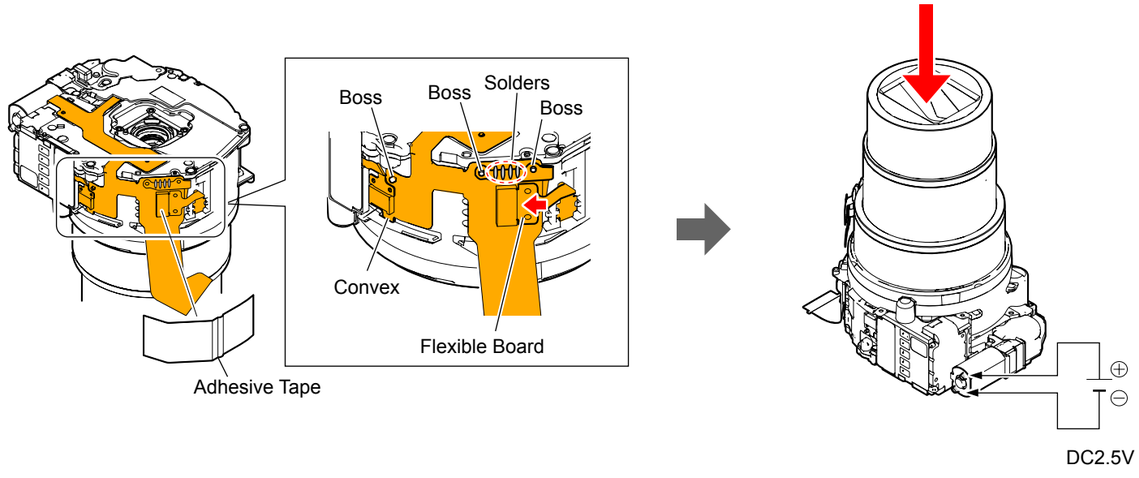
⑳ Pass the Flexible Boards through the holes and engage the four Convexes on the Flexible Boards with the four Claws.
㉑ Install the Naruto Gear.
Note: Set the Naruto Gear with its deeper hole facing down.



㉒ Install the Rear Mirror Plate Assy and the Zoom Motor Gear Block and secure them with six screws.
Note: Tighten the screws in the order of numbers in the figure below.
㉓ Install the Ornamental Ring (A) and the Barrier Assy.
Note: For how to install the Ornamental Ring (A) and the Barrier Assy, refer to "1-8. Ornamental Ring A or Barrier Assy Replacing Method."



㉔ Connect one Flexible Board to the Connector.
㉕ Fix the three Bosses and a Convex on the Flexible Board, and then solder the Flexible Board at four locations.
㉖ Stick Adhesive Tape.
㉗ Apply a voltage of 2.5 V to the DC Motor and retract the Lens.



1-12. FINAL INSPECTION

1-12-1. Confirm There is No Fault in Actual Motion/Actual Screen

Inspect it as follows when you exchange parts in the lens block.

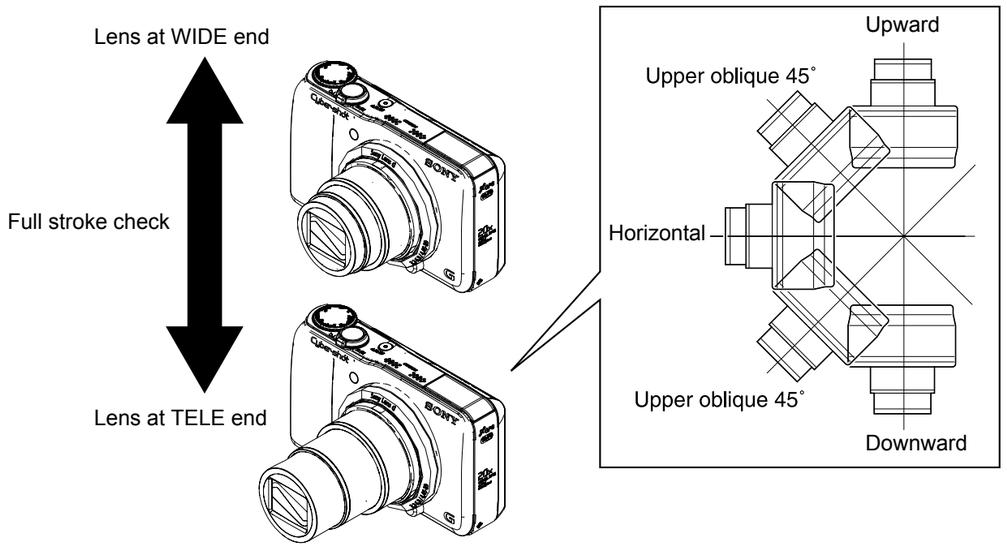
① Zoom motion (Check five postures: horizontal, upward/downward, upper/lower oblique 45º)
No abnormal sound or motion must be found over full stroke between TELE end and WIDE end.

② Zoom image
No abnormality such as a skipped image or wavy image must be found in the image through LCD or finder over full stroke between TELE end and WIDE end.

③ Barrier (Check five postures: horizontal, upward/downward, upper/lower oblique 45º)
The barrier must be opened and closed fully, free from a sticking in the midway.
No abnormal sound must be heard during the operation.

④ Appearance condition Scratches or stains must not be noticeable, except that the customer permits them.

⑤ Foreign matters on the lens The lens condition must not be worse than that when the camera was received from the customer.



1-12-2. Inspection When Cam Tube Block Assy Or Straight Tube Lubricated Assy Is Replaced

Focus check

① Preparation
- Camera installed re-assemble lens.
- Chart (Printed PDF file at the same magnification) (Refer to <Reference>)
- Tripod
- Mirror (ex. CD)
- Memory card
- PC

② Shoot setting
(1) Paste the chart.
- Chart should be on the flat wall.
- Illuminance level in the chart should be the same.
- Make the tripod's height and the center of the chart to the same height.
- Enough space needed for shooting.

(2) Set the camera.
- Set [P] mode
- Set [Maximum] size
- Set ISO lowest level
- Set Steady Shot [OFF]
- Set Flash [OFF]

(3) Set the camera on a tripod.

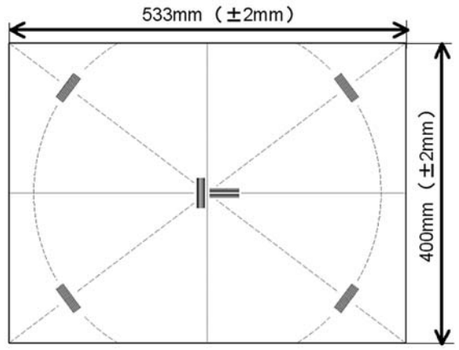
(4) Adjust the position of the camera and the chart.
1. Set the zoom position of the camera at Wide end.
2. Attach the mirror onto the center of the chart.
   * The mirror should not tilt on the chart.
3. Set the camera to display the chart on LCD like in the following picture.
4. Adjust the camera position to the center of the chart.
   * Adjust the tripod height and the position (Lateral direction).
5. Adjust the camera angle to the frame of the chart with tripod.
   Remove the mirror.

③ Shooting
(1) Set [Self-Timer]
(2) Shot

④ Check the shot image.
(1) Check the shot image on PC.
100% Display (Display at the same magnification of its Pixel.)
Compare the image with the sample you set.
No extreme focus blurring
It should be distinguished the black and white by the sharpness between them.
If it is in NG level, replace the lens unit.

<Reference>

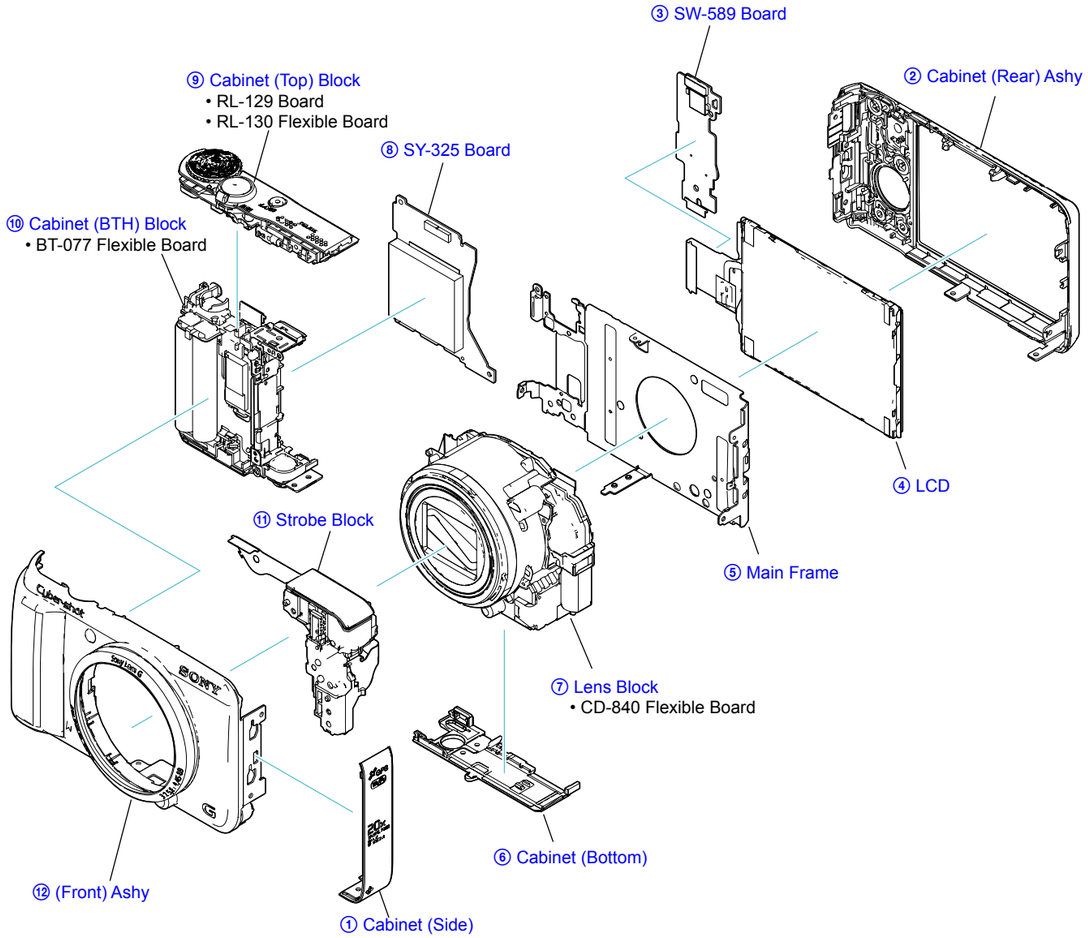
- **How to Print the Chart**
  Print "Forcus-Chart_A3.pdf" with printer.
  Print at the same magnification (It means 100 % size).
  Check the settings of printer to print in proper size.
- **Check of chart size.**
  Make charts together and check if the size of charts is the following size.
  * The chart consists of 2 pcs.



2. REPAIR PARTS LIST

IDENTIFYING PARTS

Follow the disassembly in the numerical order given.



Link DISCHARGING OF THE CHARGING CAPACITOR | ACCESSORIES | ASSEMBLY

(ENGLISH)

NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- CAPACITORS:
  uF: µF
- COILS
  uH: µH
- RESISTORS
  All resistors are in ohms.
  METAL: metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA...: µA... , uPA... , µPA... ,
  uPB... , µPB... , µPC... , µPC... ,
  uPD..., µPD...

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Caution
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.
Dispose of used batteries according to the instructions.

- Color Indication of Appearance Parts
  Example:
  (SILVER) : Cabinet's Color
  (Silver) : Parts Color

(JAPANESE)

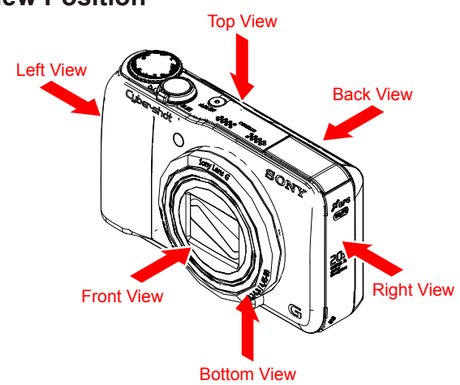
【使用上の注意】
• ここに記載されている部品は, 補修用部品であるため, 回路図及びセットに付いている部品と異なる場合があります。
• -XX, -Xは標準化部品のため, セットに付いている部品と異なる場合があります。
• *印の部品は常備在庫しておりません。
• コンデンサの単位でuFはµFを示します。
• 抵抗の単位Ωは省略してあります。
金　　被：金属被膜抵抗。
サンキン：酸化金属被膜抵抗。
• インダクタの単位でuHはµHを示します。
• 半導体の名称でuA..., uPA..., uPB..., uPC..., uPD...等はそれぞれµA..., µPA..., µPB..., µPC..., µPD...を示します。

⚠印の部品，または⚠印付の点線で囲まれた部品は，安全性を維持するために，重要な部品です。
従って交換時は，必ず指定の部品を使用してください。

- 外装部品色表示
  例：
  (SILVER) ：セットの色を表す。
  (Silver) ：部品の色を表す。

- Abbreviation
  AUS : Australian model
  CH : Chinese model
  CND : Canadian model
  HK : Hong Kong model
  J : Japanese model
  KR : Korea model
  TW : Taiwan model

View Position

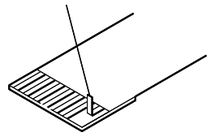


– ENGLISH –

NOTE FOR REPAIR

- Make sure that the flat cable and flexible board are not cracked of bent at the terminal.
  Do not insert the cable insufficiently nor crookedly.
- When remove a connector, don't pull at wire of connector. It is possible that a wire is snapped.
- When installing a connector, don't press down at wire of connector.
  It is possible that a wire is snapped.
- Do not apply excessive load to the gilded flexible board.

Cut and remove the part of gilt which comes off at the point.
(Be careful or some pieces of gilt may be left inside)

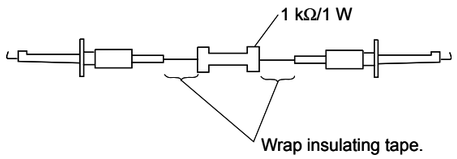


DISCHARGING OF THE CHARGING CAPACITOR (C901/C902)

The charging capacitor is charged up to the maximum 315 V potential.
There is a danger of electric shock by this high voltage when the capacitor is handled by hand. The electric shock is caused by the charged voltage which is kept without discharging when the main power of the unit is simply turned off. Therefore, the remaining voltage must be discharged as described below.

Preparing the Short Jig

To preparing the short jig, a small clip is attached to each end of a resistor of 1 kΩ /1 W (1-215-869-11).
Wrap insulating tape fully around the leads of the resistor to prevent electrical shock.

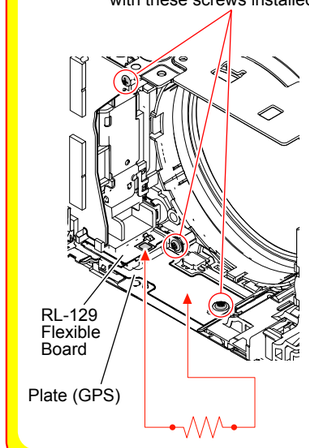


Note: High-voltage cautions

Discharging the Capacitor
Short-circuit between two points with the short jig about 10 seconds.

R: 1 k Ω/1 W
(Part code: 1-215-869-11)

Unless the screws shown below are installed, the capacitor cannot be discharged.
Discharge the capacitor with these screws installed.

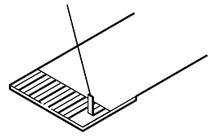


– JAPANESE –

修理時の注意

- フラットケーブルおよびフレキシブル基板の端子面に欠け，折れ等がないことを確認する。
  また，コネクタへの接続は，差し込み不足や斜め差しにならないように注意する。
- コネクタを取り外す時に，線材部(極細)を持って引っ張ると断線する恐れがありますので，絶対に線材部(極細)を持って引っ張らないでください。
- 線材部(極細)を押さえながらコネクタを差し込むと，線材部(極細)が断線する恐れがありますので，絶対に線材部(極細)には負担をかけないでください。
- 金メッキされているフレキシブル基板には，強い負担をかけないでください。

先端の剥がれたメッキ部はカットして除去してください。
（メッキ破片がコネクタ内に残っている場合もあるので注意してください）

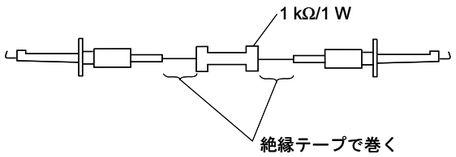


ストロボ用充電コンデンサ(C901/C902)の放電

ストロボ用充電コンデンサは最大315 Vの電圧で充電されています。
この高電圧で充電されたコンデンサに手を触れた場合，電気ショックを受けます。この高電圧には単にセットの電源を切っただけでは放電されず，残留しています。このため，下記の方法で残留電圧を放電してください。

ショート治具の準備

ショート治具は1kΩ/1W抵抗（1-215-869-11）
小型のクリップを接続して作成します。
抵抗器は絶縁テープで完全に覆い電気ショックを受けないようにしてください。

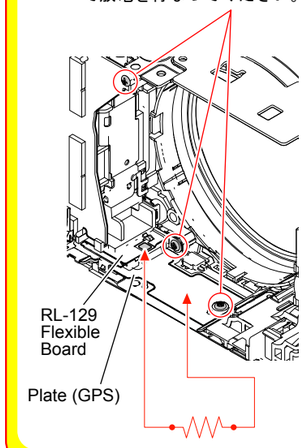


Note：高電圧の警告

コンデンサの放電
フラッシュユニットの電源コンデンサの端子間をショート治具で約10秒間接続する。

R:1 k Ω/1 W
（部品コード：1-215-869-11）

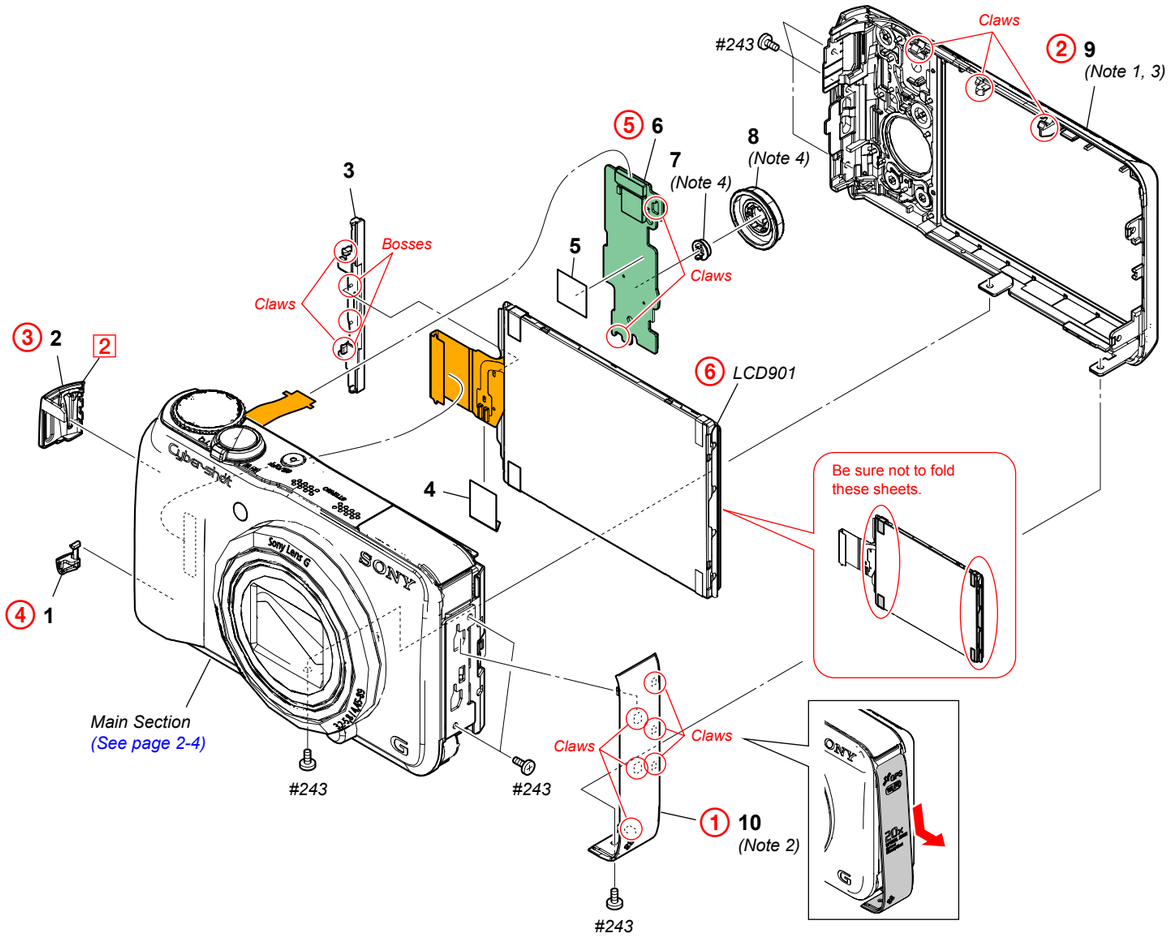
下図のねじが取り付けられていないと、放電出来ません。
ねじが取り付けらている状態で放電を行なってください。



Ver. 1.2 2012.06
The changed portions from
Ver. 1.1 are shown in blue.

2-1. EXPLODED VIEWS

2-1-1. REAR SECTION



Ref. No.	Part No.	Description
1	4-420-617-01	COVER (350), DC (BLACK)
1	4-420-617-11	COVER (350), DC (BROWN)
2	4-420-616-01	LID (350), HDMI (BLACK)
2	4-420-616-11	LID (350), HDMI (BROWN)
3	4-420-629-01	LCD RETAINER (350)
4	4-424-153-01	SHEET (LB) (350)
5	4-420-547-01	SHEET (SW) (350)
6	A-1870-787-A	SW-589 BOARD, COMPLETE (HX30/HX30V)
6	A-1870-788-A	SW-589 BOARD, COMPLETE (HX20/HX20V)
7	4-420-619-01	BUTTON (CENTER) (350) (BLACK) (Note 4)

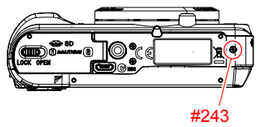
Ref. No.	Part No.	Description
7	4-420-619-11	BUTTON (CENTER) (350) (BROWN) (Note 4)
8	4-420-618-01	BUTTON (KURUPON) (350) (BLACK) (Note 4)
8	4-420-618-11	BUTTON (KURUPON) (350) (BROWN) (Note 4)
9	(Note 1)	SERVICE, CABINET (REAR) (Note 3)
10	(Note 2)	CABINET (SIDE) (350)
LCD901	A-1872-487-A	LCD BLOCK (350) SERVICE
#243	4-412-769-01	SCREW (M1.4), NEW TRU-STAR, P2

DISASSEMBLY

1. Remove to numerical order (① to ⑥) in the left figure.

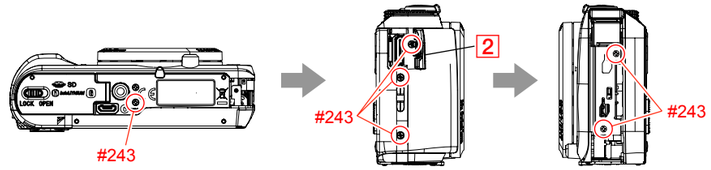
① #243 X 1

Bottom View



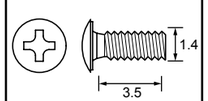
② Open the HDMI lid (2) → #243 X 6

Bottom View / Left View / Right View



Screw

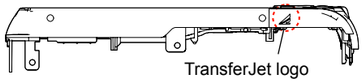
#243: M1.4 X 3.5
(Black)
4-412-769-01



Note

Note 1: When replacing this part, be careful whether a LOGO is existed or not.

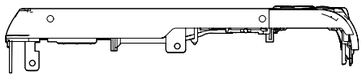
交換時にロゴの有無に注意してください。



HX30V (Jet model)
A-1878-228-A SERVICE, CABINET (REAR) (J) (BLACK)
A-1878-229-A SERVICE, CABINET (REAR) (US) (BLACK)
A-1878-233-A SERVICE, CABINET (REAR) (J) (BROWN)

HX30 (Jet model)
A-1878-236-A SERVICE, CABINET (REAR) (CH) (BLACK)
A-1878-237-A SERVICE, CABINET (REAR) (CH) (BROWN)

HX20V (Jet model)
A-1878-241-A SERVICE, CABINET (REAR) (US, UK) (BLACK)
A-1878-245-A SERVICE, CABINET (REAR) (UK) (BROWN)



HX30V (Non Jet model)
A-1878-230-A SERVICE, CABINET (REAR) (CND) (BLACK)
A-1878-231-A SERVICE, CABINET (REAR) (KR) (BLACK)
A-1878-234-A SERVICE, CABINET (REAR) (KR) (BROWN)
X-2582-937-1 CABINET(REAR) ASSY(350) (BLACK) (HK, TW) (BLACK))
X-2582-938-1 CABINET(REAR) ASSY(350) (BROWN) (HK, TW) (BROWN)

HX20V (Non Jet model)
X-2583-980-1 CABINET (REAR) ASSY (310) (BLACK)
(AEP, E, AUS) (BLACK)
X-2583-981-1 CABINET (REAR) ASSY (310) (BROWN)
(AEP, E,) (BROWN)

HX20 (Non Jet model)
X-2583-978-1 CABINET (REAR) ASSY (241) (BLACK)

Note 2: When replacing this part, be careful whether a LOGO is existed or not.

交換時にロゴの有無に注意してください。

GPS logo
GPSのロゴ
Wi-Fi logo
Wi-Fiのロゴ

4-420-614-01 CABINET (SIDE) (350) (HX30V) (BLACK)
4-420-614-11 CABINET (SIDE) (350) (HX30V) (BROWN)

Wi-Fi logo
Wi-Fiのロゴ

4-420-614-21 CABINET (SIDE) (350) (HX30) (BLACK)
4-420-614-31 CABINET (SIDE) (350) (HX30) (BROWN)

GPS logo
GPSのロゴ

4-420-614-41 CABINET (SIDE) (350) (HX20V) (BLACK)
4-420-614-51 CABINET (SIDE) (350) (HX20V) (BROWN)

4-420-614-61 CABINET (SIDE) (350) (HX20) (BLACK)

Note 3: Refer to “Assembly-1 : Installation Cautions of the Rear Cover Assy.”.

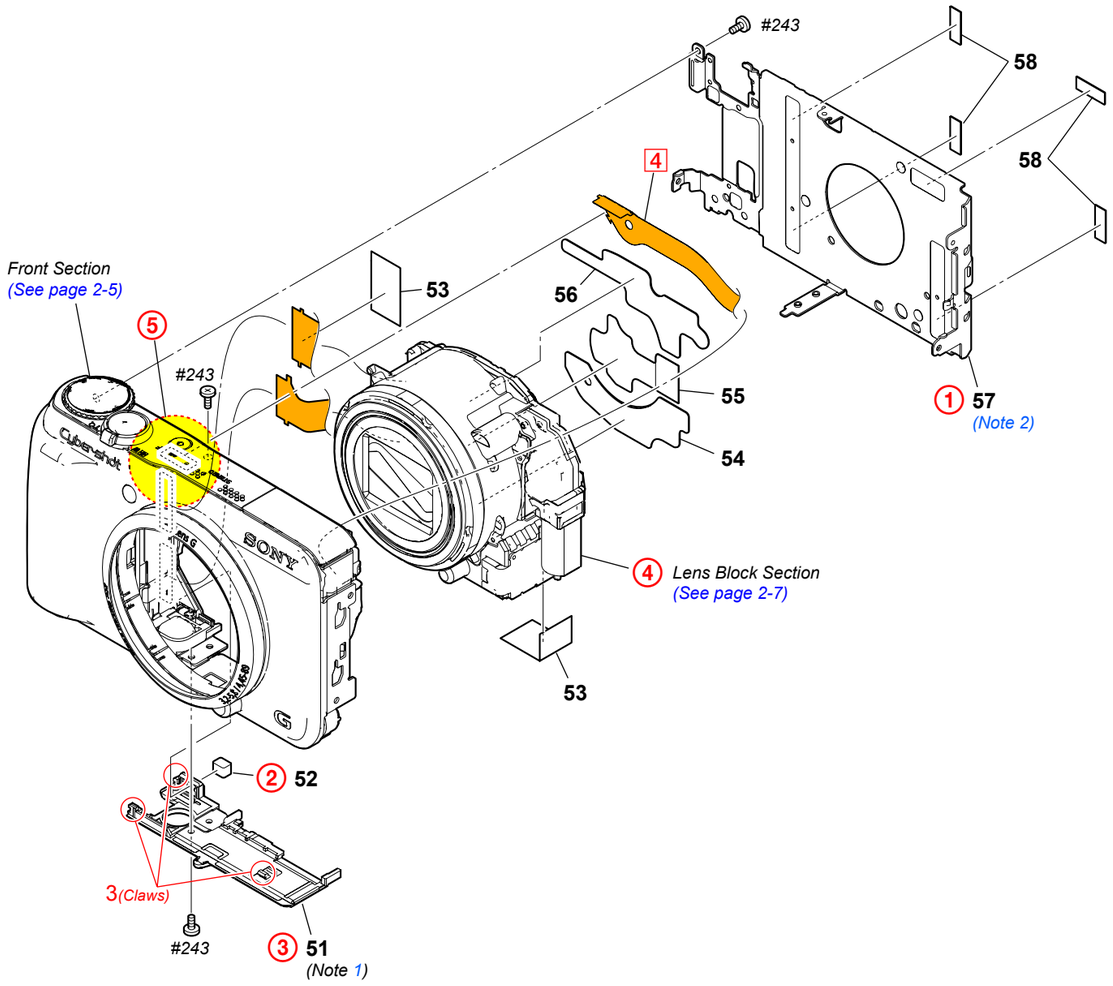
Note 3: “Assembly-1 : Installation Cautions of the Rear Cover Assy.” を参照してください。

Note 4: Refer to “Assembly-2 :Installation Cautions of the Button (Center), Button (Kurupon).”.

Note 4: “Assembly-2 : Installation Cautions of the Button (Center), Button (Kurupon).” を参照してください。

Ver. 1.1 2012.05
The changed portions from
Ver. 1.0 are shown in blue.

2-1-2. MAIN SECTION



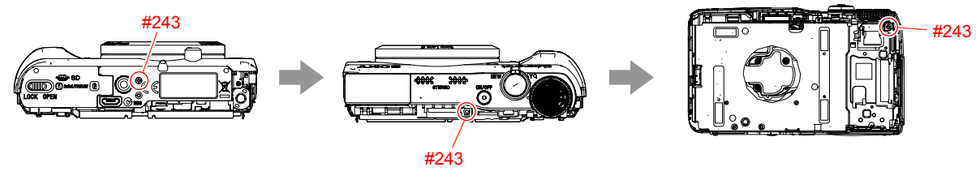
Ref. No.	Part No.	Description
51	(Note 1)	BOTTOM (350), CABINET
52	4-420-633-01	GASKET (USB) (350)
53	4-424-153-01	SHEET (LB) (350)
54	4-420-639-01	CUSHION (LENS-S) (350)
55	4-420-640-01	SHEET (CD) (350), RADIATION
56	4-420-638-01	CUSHION (LENS-T) (350)
57	4-420-626-01	FRAME (MAIN) (350) (Note 2)
58	4-420-630-01	CUSHION (LCD-S) (350)
#243	4-412-769-01	SCREW (M1.4), NEW TRU-STAR, P2

DISASSEMBLY

1. Remove to numerical order (① to ⑤) in the left figure.

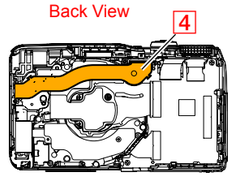
① #243 X 3

Bottom View　　Top View　　Back View



④ Disconnect flexible board (4)

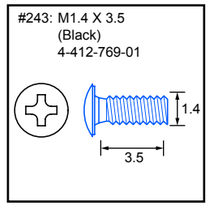
Back View



⑤

DISCHARGING OF THE CHARGING CAPACITOR　　**ストロボ用充電コンデンサの放電**

Screw



Note

Note 1: Refer to page 1-5 “Precaution on replacing the Cabinet (Bottom)” when changing the Cabinet (Bottom).

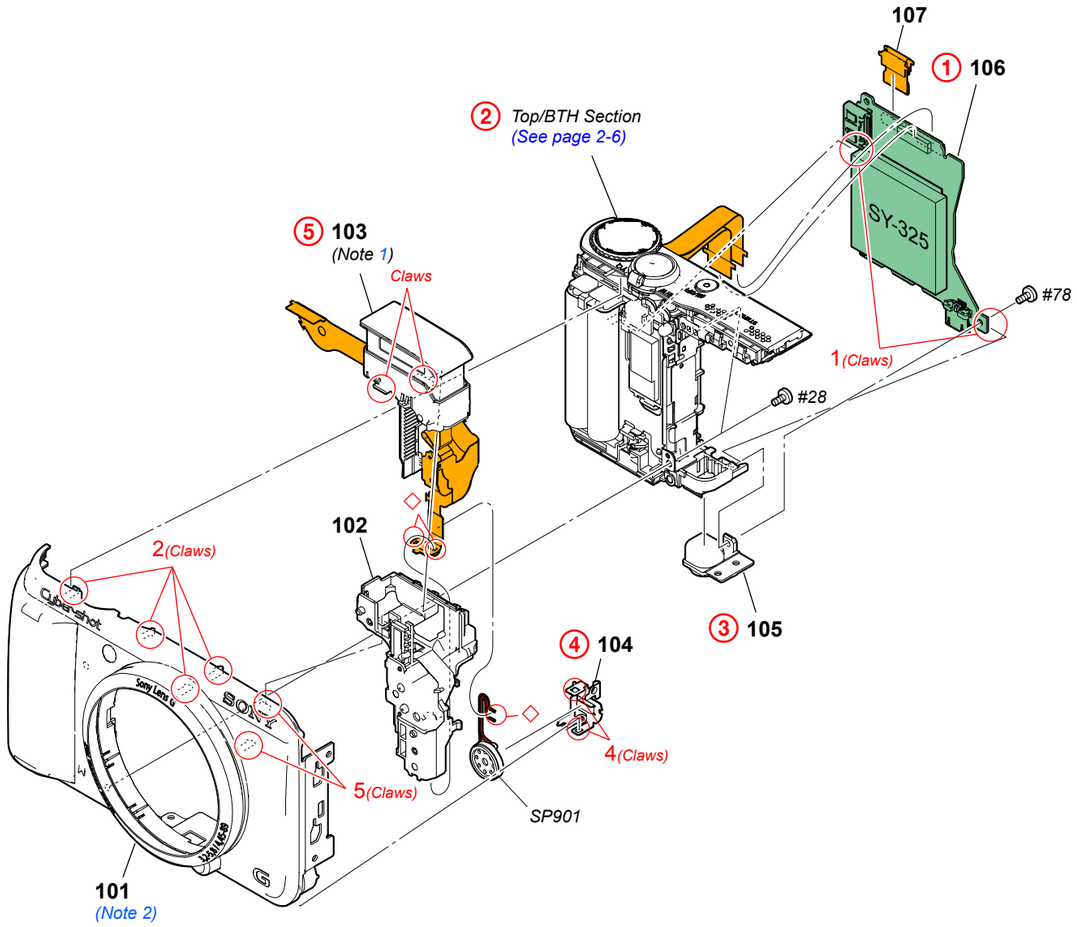
Note 1: キャビネットボトム組立の交換時は、1-11ページの“キャビネット(底)交換時の注意”を参照してください。

Note 2: When this part is removed, adjustment is required. For the adjustment method, refer to “Adjustment items after replacing parts” in the Note tab of the Adjust manual.

Note 2: この部品を取り外したときは調整が必要です。調整方法については Adjust manual の Noteタブにある Adjustment items after replacing parts を参照してください。

Ver. 1.1 2012.05
The changed portions from
Ver. 1.0 are shown in blue.

2-1-3. FRONT SECTION



Ref. No.	Part No.	Description
101	X-2582-931-1	(FRONT) ASSY (350) (BLACK) (BLACK) (Note 2)
101	X-2582-932-1	(FRONT) ASSY (350) (BROWN) (BROWN) (Note 2)
102	X-2584-079-1	GEAR ASSY (350), ST
103	A-1872-783-A	ST BLOCK (350) BLACK SERVICE (BLACK) (Note 1)
103	A-1872-784-A	ST BLOCK (350) BROWN SERVICE (BROWN) (Note 1)
104	4-420-627-01	PLATE (SP) (350)
105	4-420-625-01	SCREW, TRIPOD (350)

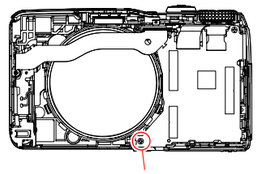
Ref. No.	Part No.	Description
106	A-1872-666-A	SY-325 BOARD, COMPLETE (SERVICE)
107	1-885-489-11	SW-592 FLEXIBLE BOARD
SP901	1-858-343-51	LOUDSPEAKER (1.0CM)
#28	3-348-998-61	SCREW (M1.4X4), TAPPING, PAN
#78	3-208-537-11	0+Z M1.4X2 NEW TORASUTA

DISASSEMBLY

1. Remove to numerical order (① to ⑤) in the left figure.
2. The meaning of the sign in left figure is as follows. Be careful when it removes.
   ◇: Solder

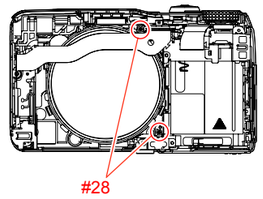
① #78 X 1

Back View

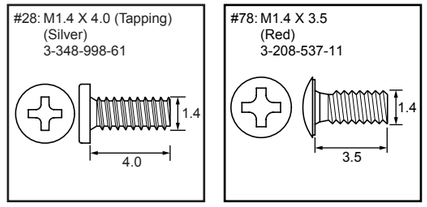


② #28 X 2

Back View



Screw



Note

Note 1: Refer to “Assembly-4 : Precaution During of ST block installation.”.

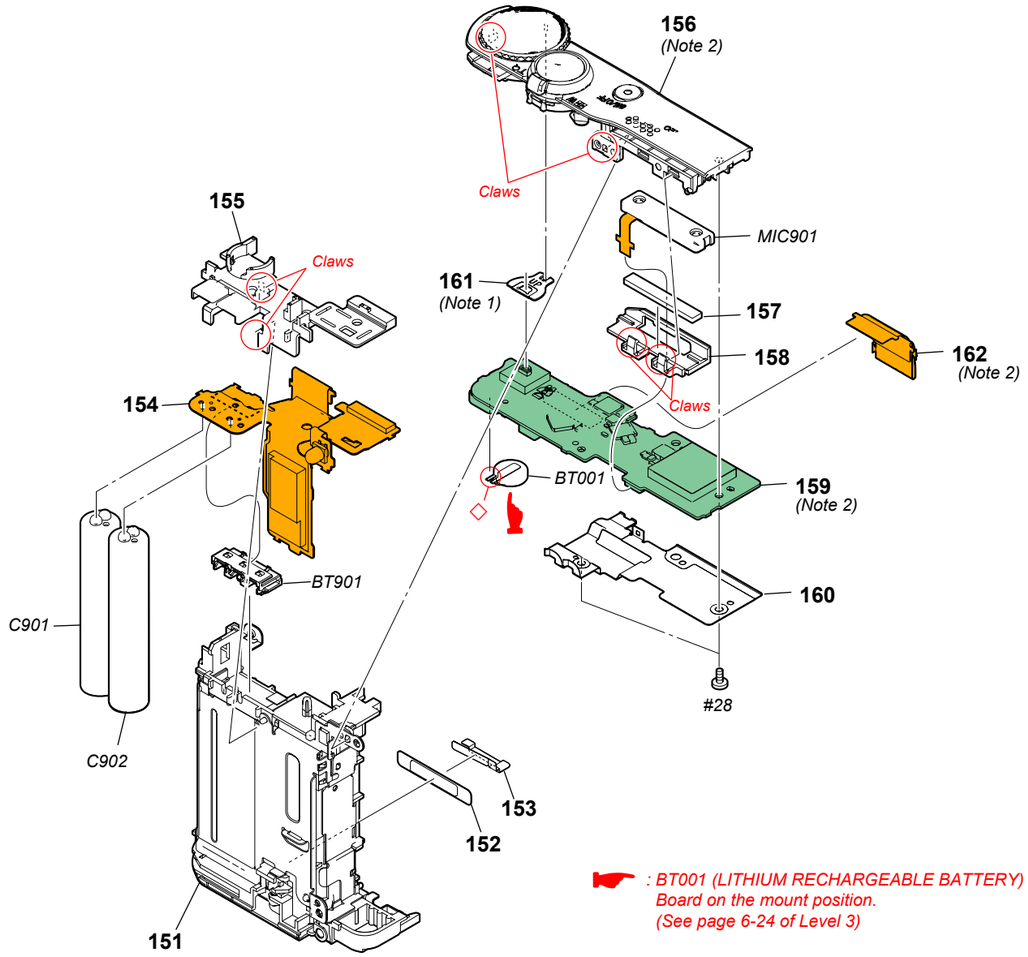
Note 1: “Assembly-4 : Precaution During of ST block installation.” を参照してください。

Note 2: When this part is removed, adjustment is required. For the adjustment method, refer to “Adjustment items after replacing parts” in the Note tab of the Adjust manual.

Note 2: この部品を取り外したときは調整が必要です。
調整方法については Adjust manual の Noteタブにある Adjustment items after replacing parts を参照してください。

Ver. 1.2 2012.06
The changed portions from
Ver. 1.1 are shown in blue.

2-1-4. TOP/BTH SECTION



☛ : BT001 (LITHIUM RECHARGEABLE BATTERY)
Board on the mount position.
(See page 6-24 of Level 3)

Ref. No.	Part No.	Description
151	X-2582-933-1	BTH ASSY (350) (BLACK) (BLACK)
151	X-2582-934-1	BTH ASSY (350) (BROWN) (BROWN)
152	4-420-624-01	COVER (JET) (350)
153	4-420-623-01	PLATE (JET) (350)
154	A-1870-789-A	BT-077 FLEXIBLE BOARD, COMPLETE
155	4-420-628-01	RETAINER (350), RL
156	X-2582-935-1	(UPPER) ASSY (350) (BLACK) (BLACK) (Note 2)
156	X-2582-936-1	(UPPER) ASSY (350) (BROWN) (BROWN) (Note 2)
157	4-420-622-01	CUSHION (MIC LOWER) (350)
158	4-420-621-01	RETAINER (350), MICROPHONE

Ref. No.	Part No.	Description
159	A-1873-028-A	RL-129 BOARD, COMPLETE (SERVICE) (HX20V/HX30V) (Note 2)
159	A-1870-786-A	RL-129 BOARD, COMPLETE (SERVICE) (HX20/HX30) (Note 2)
160	4-420-620-01	PLATE (GPS) (350)
161	4-416-599-01	PLATE (330), ROTARY (Note 1)
162	1-885-400-11	RL-130 FLEXIBLE BOARD (Note 2)
⚠ BT001	1-756-710-12	LITHIUM RECHARGEABLE BATTERY
⚠ *BT901	1-780-826-11	TERMINAL BOARD, BATTERY
⚠ C901	1-118-124-11	CAP, ALUMINIUM ELECT 67uF 315V
⚠ C902	1-118-124-11	CAP, ALUMINIUM ELECT 67uF 315V
MIC901	1-542-862-61	MICROPHONE UNIT
#28	3-348-998-61	SCREW (M1.4X4), TAPPING, PAN

DISASSEMBLY

1. The meaning of the sign in left figure is as follows. Be careful when it removes.
◇-X: Solder

Screw

#28: M1.4 X 4.0 (Tapping)
(Silver)
3-348-998-61

Note

Note 1: Refer to “Assembly-3 : Installation Cautions of the RL-129 Board.”.

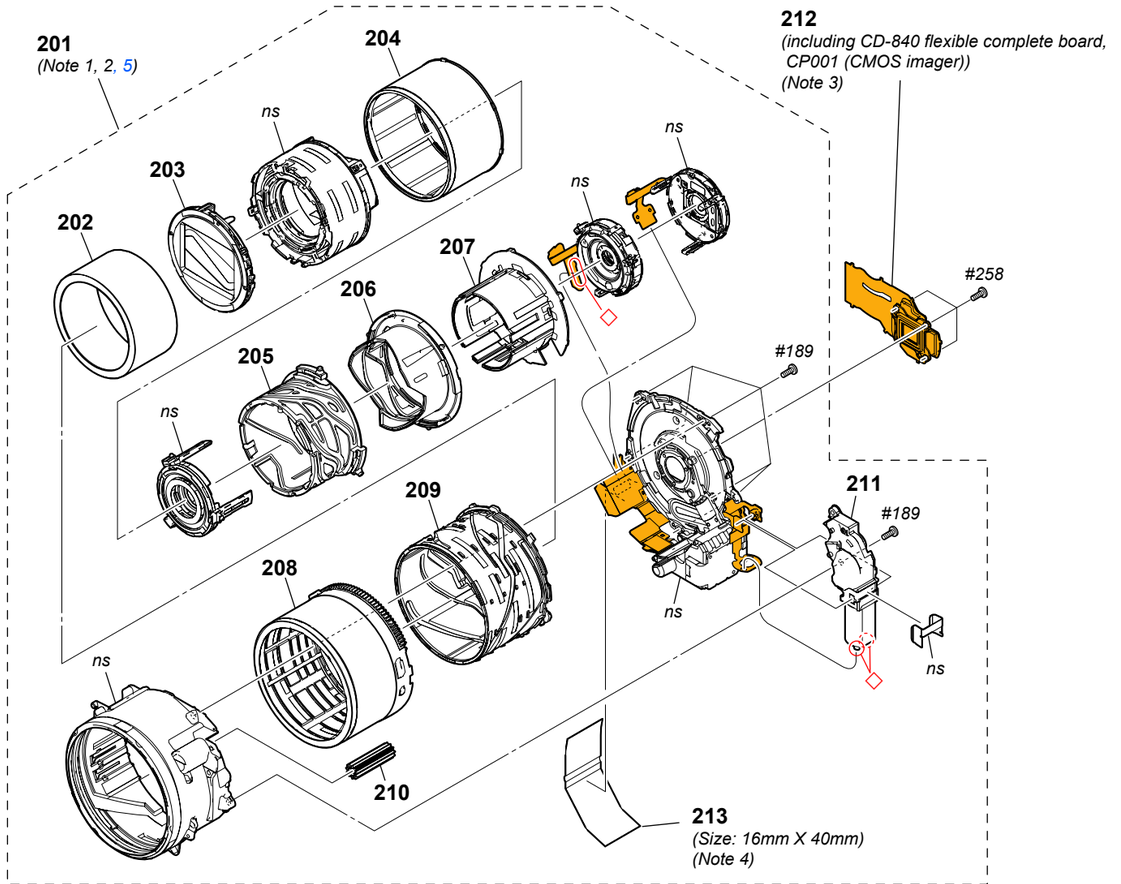
Note 1: “Assembly-3 : Installation Cautions of the RL-129 Board.” を参照してください。

Note 2: When this part is removed, adjustment is required.
For the adjustment method, refer to “Adjustment items after replacing parts” in the Note tab of the Adjust manual.

Note 2: この部品を取り外したときは調整が必要です。
調整方法については Adjust manual の Noteタブにある Adjustment items after replacing parts を参照してください。

2-1-5. LENS BLOCK SECTION

ns: not supplied

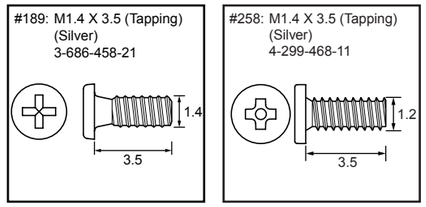


Ref. No.	Part No.	Description
201	1-856-265-11	OPTICAL UNIT (BE017) (Note 1, 2, 5)
202	4-424-721-01	RING (A), ORNAMENTAL
203	X-2584-294-1	BARRIER ASSY
204	X-2584-295-1	TUBE (A) ASSY, STRAIGHT
205	4-424-723-01	TUBE (A), CAM
206	X-2584-297-1	TUBE (B) ASSY, CAM
207	4-424-724-01	TUBE (B), STRAIGHT
208	X-2584-296-1	TUBE ASSY, ROTARY
209	4-424-722-01	TUBE, FEED-THROUGH CAM
210	4-424-720-01	GEAR, NARUTO
211	1-490-422-11	GEAR BLOCK, ZOOM MOTOR (BE017)
212	A-1870-790-A	CD-840 FLEXIBLE BOARD, COMPLETE (including CP001 (CMOS imager)) (Note 3)
213	2-580-751-01	SHEET, POLYIMIDE (Note 4)
#189	3-686-458-21	SCREW (P1.4), TAPPING
#258	4-299-468-11	SCREW, TAPPING UB1.2

DISASSEMBLY

1. The meaning of the sign in left figure is as follows. Be careful when it removes.
   ◇-X: Solder

Screw

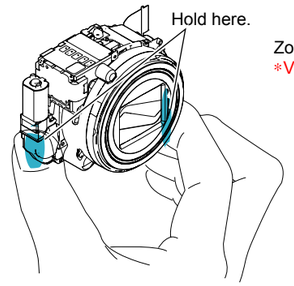


Note

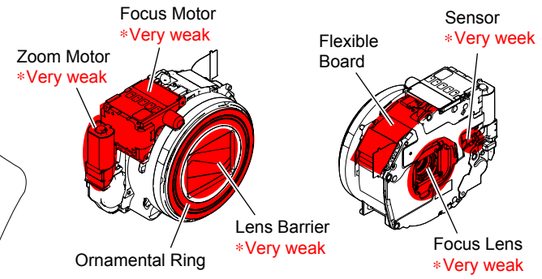
Note 1:

PRECAUTIONS WHEN HOLDING THE LENS BLOCK

Hold the Lens Block at the center of both sides.



Do not hold the following part.



Note 2: Refer to the following each item when you exchange parts of Lens Block.
- 1-9. ORNAMENTAL RING A OR BARRIER ASSY REPLACING METHOD (page 1-12)
- 1-10. ZOOM MOTOR GEAR BLOCK REPLACING METHOD (page 1-12)
- 1-11. CAM TUBE (B) ASSY REPLACING METHOD (page 1-13)
- 1-12. FINAL INSPECTION (page 1-19)

Note 2: レンズブロックの各部品を交換する際は，下記の各項目を参照してください。
- 1-9. ORNAMENTAL RING A OR BARRIER ASSY REPLACING METHOD (page 1-12)
- 1-10. ZOOM MOTOR GEAR BLOCK REPLACING METHOD (page 1-12)
- 1-11. CAM TUBE (B) ASSY REPLACING METHOD (page 1-13)
- 1-12. FINAL INSPECTION (page 1-19)

Note 3: Be sure to read “Precautions for Replacement of Imager” on page 6-1 of Level 3 when changing the imager.

Note 3: イメージャの交換時はLevel3の6-1ページ、“イメージャ交換時の注意” を必ずお読みください。

Note 4: Cut SHEET, POLYIMIDE (2-580-751-01) into the designed length and use it.

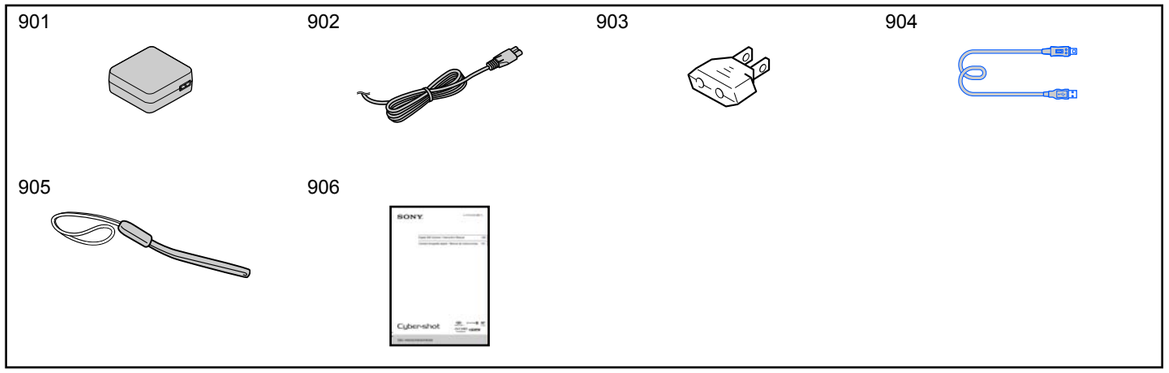
Note 4: SHEET、POLYIMIDE（2-580-751-01）は切って使用してください。

Note 5: When this part is removed, adjustment is required. For the adjustment method, refer to “Adjustment items after replacing parts” in the Note tab of the Adjust manual.

Note 5: この部品を取り外したときは調整が必要です。調整方法については Adjust manual の Noteタブにある Adjustment items after replacing parts を参照してください。

Ver. 1.1 2012.05
The changed portions from
Ver. 1.0 are shown in blue.

ACCESSORIES



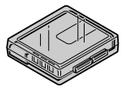
Ref. No.	Part No.	Description
⚠901	1-489-282-11	AC Adaptor AC-UB10/UB12B (J)
⚠901	1-489-282-21	AC Adaptor AC-UB10/UB10B (US, CND)
⚠901	1-489-282-31	AC Adaptor AC-UB10/UB10B (CH)
⚠901	1-489-282-61	AC Adaptor AC-UB10/UB17B (EXCEPT US, CND, CH, J)
⚠902	1-837-421-11	Power cord (mains lead) (UK, E (Saudi), HK)
⚠902	1-837-424-11	Power cord (mains lead) (TW)
⚠902	1-837-427-11	Power cord (mains lead) (AEP, E (EXCEPT Saudi))
⚠902	1-837-428-11	Power cord (mains lead) (KR)
⚠902	1-837-429-11	Power cord (mains lead) (AUS)
⚠903	1-569-008-12	Conversion (2P) Adaptor (E: NTSC)
904	1-839-666-11	Micro USB cable
905	2-050-981-11	Wrist strap
906	4-419-605-01	Instruction Manual (JAPANESE)
* 906	4-419-605-11	Instruction Manual (SIMPLIFIED CHINESE)
906	4-419-606-11	Instruction Manual (ENGLISH)
* 906	4-419-606-21	Instruction Manual (ENGLISH, SPANISH)
* 906	4-419-606-31	Instruction Manual (ENGLISH, FRENCH)
* 906	4-419-606-41	Instruction Manual (ENGLISH, RUSSIAN, UKRAINIAN)
* 906	4-419-606-51	Instruction Manual (ENGLISH, FRENCH, ITALIAN, SPANISH, PORTUGUESE, GERMAN, DUTCH, TURKISH, GREEK, POLISH, CZECH, HUNGARIAN, SLOVAK, SWEDISH, FINNISH, NORWEGIAN, DANISH, CROATIAN, ROMANIAN)
* 906	4-419-606-61	Instruction Manual (ENGLISH, SIMPLIFIED CHINESE, TRADITIONAL CHINESE, MALAY, INDONESIAN, THAI, ARABIC, PERSIAN)

Ref. No.	Part No.	Description
* 906	4-419-606-71	Instruction Manual (ENGLISH, SPANISH, PORTUGUESE)
* 906	4-419-606-81	Instruction Manual (ENGLISH, ARABIC, PERSIAN)
* 906	4-419-606-91	Instruction Manual (ENGLISH, TRADITIONAL CHINESE)
906	4-419-607-11	Instruction Manual (ENGLISH, TRADITIONAL CHINESE, SIMPLIFIED CHINESE)
906	4-419-607-21	Instruction Manual (KOREAN)

Note: This unit has no bundled CD-ROM.
Contents included in the CD-ROM will be supplied to customers as follows.
- User Guide (HTML)
  - You can access to the URL of support site described in the Instruction Manual.
  - All of the contents in the User Guide are included in the Instruction Manual or built-in guide.
- Application Software
  - By connecting this unit and Windows PC with the USB cable, the application software [PlayMemories Home Lite version] can be installed on the PC from the unit.
  - In case of using the extended version, install “Expanded Feature” via Internet.

This item is supplied with the unit as an accessory, but is not prepared as a service part.

951

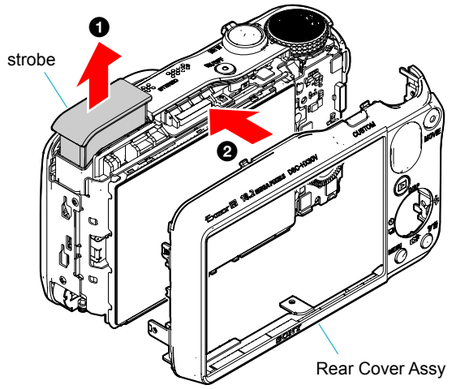


Ref. No.	Part No.	Description
⚠951	(Not supplied)	Rechargeable battery pack NP-BG1

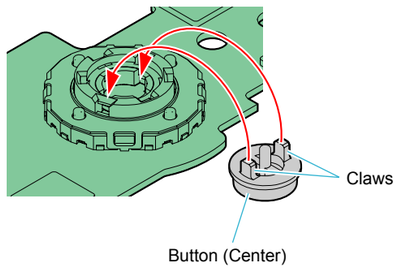
3. ASSEMBLY

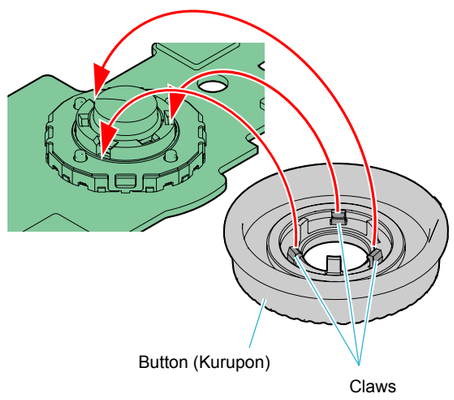
Assembly-1: Installation Cautions of the Rear Cover Assy.

Be sure to install the Rear Cover Assy with the strobe pulled out.

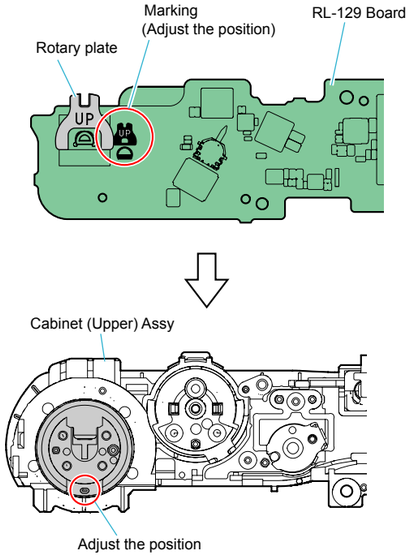


Assembly-2: Installation Cautions of the Button (Center), Button (Kurupon).



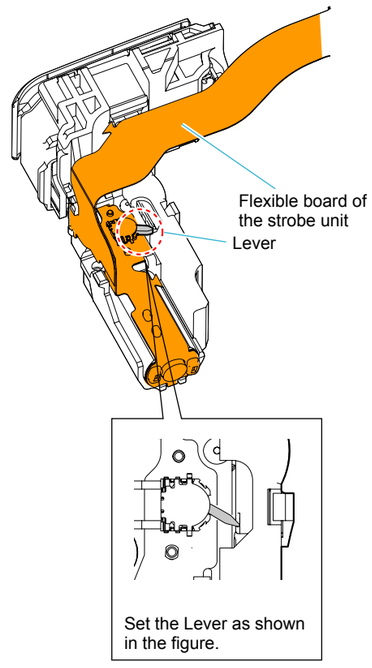


Assembly-3: Installation Cautions of the RL-129 Board.



Assembly-4: Precaution During of ST block installation.

Set the switch of the Flexible board of the strobe unit as shown in the figure.



SONY

NOTE

The wireless LAN connection settings have been initialized and the MAC address has also been modified during this repair.

Make settings again for connection to devices as needed.

For details of settings, refer to the Instruction Manual.

SONY

注意

因為修理原因，無線 LAN 的連接設定已初始化。
此外，MAC 地址也已變更。
請務必要再度為所有通訊裝置進行起始設定。
關於進行設定的詳細資訊，請參考“使用說明書”。

SONY

참고

이 복구가 수행되는 동안 무선 LAN 연결 설정이 초기화되었고 MAC 주소가 수정되었습니다 .
필요에 따라 장치에 대한 연결을 다시 설정하십시오 .
설정에 대한 자세한 내용은 사용 설명서를 참조하십시오 .